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#107 May 2004

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8 TO 10 GAUGE 28° ANGLE FRAMING NAILER

Lightweight body, contractor-tough. Uses 8 to 10 gauge stick-fed nails. 28° anti-jam magazine holds up to 90 nails.
 Nail size: 2" to 3-1/2"; Operating pressure: 100 PSI; Air inlet size: 1/4" x 18 NPT; Weight: 8-8/10 lbs.

ITEM 91053-1SMA
~~\$199~~ **\$99**

10 GAUGE CLIPPED HEAD FRAMING NAILS

2-1/2"L; 28° angle.
 ITEM 40535-2SMA **\$17**

10 GAUGE CLIPPED HEAD RUST-RESISTANT FRAMING NAILS

2-1/2"L; 28° angle.
 ITEM 40536-2SMA **\$19**



10" PROFESSIONAL TABLE SAW

Includes steel stand, 2 table extensions, rip fence, blade guard, anti-kickback pawls and miter gauge. Blade sold separately.
 Motor: 3HP, 115V, 14 amps, 3400 RPM; Blade: 10"; Arbor: 5/8"; Max. lift: 45°; Max. depth of cut: 3-1/8" @ 90°, 2-1/8" @ 45°; Max. rip: 22-5/8"; Dimensions: 44-1/16" W x 27" L; Table extensions: steel 12" x 27"; Miter gauge stops: 0° and 90°; Shipping weight: 263 lbs.

ITEM 46813-1SMA **\$299**

10 x 60 TOOTH MARATHON SAW BLADE

ITEM 36443-1SMA **\$39**

4 PC. WOODWORKING SAFETY KIT

ITEM 44683-1SMA **\$9**



ELECTRIC CUTOUT TOOL

Superior to jigsaws for cutting into walls, floors and ceilings. Get right down to work - no need to drill pilot holes. Cuts sideways and down. HSS spiral bit cuts wood up to 1", plywood, plastics and paneling. Use with carbide bits (sold separately) to cut through plaster, ceramic wall tile, cement board and fiberglass. High impact housing. Includes: 1/8" and 1/4" collets plus an 1/8" High speed steel spiral bit.

- 115V, 60 Hz, 420 watts, 3.5 amps
- 28,000 RPM
- Depth gauge height: 1/2" to 1-5/16"

ITEM 42831-3SMA ~~\$39~~ **\$19**



1-1/4" STROKE VARIABLE SPEED RECIPROCATING SAW

Comes with extra brushes, hex key, one 6" blade for wood, one 4" blade for metal. 120V, 4.5 amps, 60Hz; Blade shank: pin-style; Construction: high-impact ABS body, sturdy aluminum gear housing; Cutting capacity: 90°; Stroke length: 1-1/4"; Speed: 0-2300 strokes per minute; Weight: 6.7 lbs.

ITEM 04095-1SMA ~~\$49~~ **\$24**

15 PC. RECIPROCATING SAW BLADES

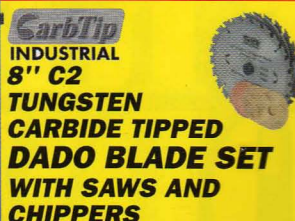
Ten metal cutting blades and five wood cutting blades.
 Universal 1/2" shank
 ITEM 40986-0SMA **\$5**



ECONOMY C2 CARBIDE DOORMAKER'S BIT SET

- Fully shielded bearings
- Raised panel bit: 1-3/16" profile width; 5/8" cutter height, 3-1/16" cutting diameter
- Stile bit: 3/8" profile width, 3/4" cutter height, 1-11/16" cutting diameter
- Rail bit: 3/8" profile width, 3/4" cutter height, 1-11/16" cutting diameter
- 1/2" Shanks, C2 carbide cutting tips, 8000 RPM max.

ITEM 90009-1SMA ~~\$39~~ **\$19**



INDUSTRIAL 8" C2 TUNGSTEN CARBIDE TIPPED DADO BLADE SET WITH SAWS AND CHIPPERS

Cuts clean and smooth grooves and dados from 1/8" to 13/16" wide. Use for hard or soft woods, plywood, low-density particle board and laminates. C2 tungsten micro-grain carbide tips last longer than steel blades and can be resharpened. One chipper is 1/16" thick, all others are 1/8" thick. 4500 RPM maximum.

- Includes:
- Two 22 tooth 8" outerblades
 - Five, 2 tooth chipper blades
 - Includes brass shimlocks

ITEM 40745-4SMA ~~\$39~~ **\$19**

U.S. General A. 13 DRAWER, INDUSTRIAL QUALITY ROLLER TOOL CHEST

- Industrial quality all steel construction
- Internally welded joints for durability
- Heavy duty ball bearing slides on all drawers
- Lockable drawers (key included)
- Four 5" casters (2 fixed and 2 swivel with brake)
- Rustproof powder coat finish
- Includes no-slip rubber mats in each drawer and on top
- Overall dimensions: 44-3/4" W x 18-1/2" D x 40" H; Storage capacity: 11,528 cubic inches; Load capacity: 475 lbs

B. 7 DRAWER END CABINET

- Same industrial quality construction, designed to fit roller tool chest above
- Overall dimensions: 17-3/8" W x 18-1/8" D x 33-1/4" H
- Drawer sizes: (5) 16-1/8" W x 11-3/4" D x

SIMILAR CABINETS SOLD NATIONWIDE FOR OVER \$5000



Drawer sizes: (1) 36-3/4" W x 16" D x 3-1/2" H (top drawer); (5) 22-1/8" W x 16-1/4" D x 2-1/8" H; (1) 22-1/8" W x 16-1/4" D x 5-3/8" H; (5) 11-7/8" W x 16-1/4" D x 2-1/8" H; (1) 11-3/8" W x 16-1/4" D x 5-3/8" H; Weight: 399.8 lbs; Shipping wt.: 464.8 lbs.

ITEM 90320-0SMA **\$499**

2-1/4" H; (2) 16-1/8" W x 12" D x 5-3/8" W; Weight: 113.9 lbs; Shipping weight: 129.3 lbs.

ITEM 90321-0SMA **\$199**



3/4" - 2-1/2" HOLE SAW SET (13 PC.)

Includes 8 tool steel cups sized: 3/4", 1", 1-1/8", 1-1/4", 1-1/2", 1-3/4", 2", and 2-1/2" plus 1/4" and 3/8" mandrels, 1/4" bit (2" long), hex wrench and blow mold case.

ITEM 38425-1SMA ~~\$11~~ **\$5**



UNIVERSAL TOOL STAND

Turn your benchtop power tool into a super-sturdy floor model. Just add your own top and this heavy duty stand can accommodate table saws, grinders, drill presses, sanders and planers. It can be adjusted from 26" to 32" high and supports up to 500 lbs. Legs can be anchored to the floor for added stability.

ITEM 46075-1SMA ~~\$24~~ **\$19**

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18 VOLT, CORDLESS 4 TOOL COMBO PACK

Includes 3/8" variable speed reversible drill, oscillating triangle sander, 8 watt flashlight, jigsaw, blade, hex key, one 18 volt long run battery, charger and carrying case. Includes one of the four batteries shown.

Drill: 3/8" keyless chuck, 0-900 RPM, 8 torque settings; **Sander:** Triangular pad, oscillating, 6000 OPM, rocker switch; **Flashlight:** 0° to 90° swivel head, 8 watt bulb, pistol grip; **Jigsaw:** reciprocating, 1/2" stroke, 1700 SPM, blade guard, angle adjustment, includes one 24 tooth wood (pin type) blade and hex key; Shipping weight: 13 lbs.

~~\$59.99~~ **\$39.99**

ITEM 90374-2SMA

18 VOLT BATTERY ~~\$9.99~~ **\$9.99**

ITEM 90121-0SMA

5 PC., C2 CARBIDE KITCHEN DOOR & DRAWER BIT SET

Make custom kitchen cabinetry, raised panel doors, table tops and drawer assemblies with these specially selected bits.

- C2 carbide tips
 - Fully shielded bearings
- Raised panel bit specs: 1-1/2" profile width; 5/8" cutter height, 3-1/2" cutter dia.; Stile & rail bit: 7/16" profile width; 7/8" cutter height, 1-3/4" cutter dia.; Reverse glue join bit: 1/2" profile width, 1-1/4" cutter height, 1-3/4" cutter dia.; Drawer lock bit: 7/16" profile width, 1/2" cutter height, 1" cutter dia.; 6000 max. RPM; 1/2" shanks

~~\$59.99~~ **\$39.99**

ITEM 90011-2SMA

CENTRAL MACHINERY DRILL 1/4", 3/8", AND 1/2" SQUARE HOLES

MORTISING MACHINE

Make a square hole in the fraction of the time it takes by hand! Easier layout for professional mortise and tenon joints in furniture, cabinets, and restoration projects. Fence with hold down clamp keeps workpieces from lifting off the table. Large capacity - up to 5" maximum height. Includes fence, workpiece clamp, and 1/4", 3/8", and 1/2" mortising chisels and bits.

5" max. workpiece height; 5" throat; Accepts .745" chisel shanks; 1/2 HP, 110V, 2.3 amps; 3580 RPM spindle speed; 13-3/8" x 6" table; 10-7/8" x 7-3/4" base; 60 lbs. shipping weight

~~\$159.99~~ **\$99.99**

ITEM 35570-2SMA

18 GAUGE, 3/8" TO 2" AIR BRAD NAILER

Use this compact, lightweight, brad tool for jobs requiring a strong pin and an easily concealed hole. Perfect for linear strips, window casings, paneling and facing strips, wall paneling, and corner fillets. Constructed for high-volume production applications. Includes wrenches and tool oil.

- 3/8" to 2" brad size range
- 18 gauge
- 100 brad capacity
- 55-95 PSI
- 1/4" NPT inlet
- Weighs only 4-1/4 lbs.

CENTRAL PNEUMATIC
CONTRACTOR SERIES

~~\$49.99~~ **\$24.99**

ITEM 46309-3SMA

60 TOOTH CARBIDE BLADE 10" COMPOUND SLIDE MITER SAW

- Powerful 10.8 amp motor, 1-3/4 HP
 - Dual rail with linear ball bearings and self-cleaning dust seals for smooth slide action
 - Positive stops at 0, 22-1/2° and 45° left and right
 - Precision machined table
- Comes with hold-down clamp, 10" x 60 tooth C2 carbide tipped blade, wrench, dust bag and spare brushes. Motor: 110V, 60 Hz, single phase; 4000 RPM max; Arbor: 5/8"; Cutting capacity 5-3/8" max.; Weight: 51.6 lbs.

LASER CUTTING GUIDE

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~~\$39.99~~ **\$39.99**

ITEM 90173-2SMA

CHICAGO Electric Power Tools



~~\$199.99~~ **\$99.99**

ITEM 90891-1SMA

CARB TIP INDUSTRIAL COMBINATION SAW BLADES

Alternate top bevel, C2 tungsten carbide tips; Heat-treated high carbon steel body; 5/8" arbor; 7000 RPM max.

DESCRIPTION	ITEM	PRICE
10" x 60 Tooth	38543-2SMA	\$9.99 \$9.99
10" x 80 Tooth	38544-6SMA	\$14.99 \$14.99

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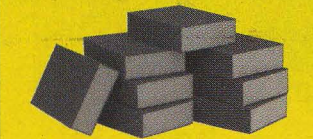


10", 50 TOOTH ALTERNATE TOP BEVEL DESIGN NOVELTY COMBO BLADE

- C3 tungsten carbide tips
 - Heat-treated surface ground steel alloy body
 - Hand tensioned
 - Copper plugged expansion slots for noise reduction
 - Tips ground to keen micro sharp edge
- Arbor: 5/8"; Size: 10"; Teeth: 50; 7000 RPM max.

~~\$13.99~~ **\$9.99**

ITEM 46231-1SMA



SANDING SPONGES (10 PACK) 1/2 OFF!

Flexible foam sanding pads conform to almost any shape without altering the contours of the item. Great for sanding odd shapes, edges and into grooves. Reusable and washable, they last longer than sandpaper with less cleanup. Coated with an aluminum oxide abrasive for use with wood, drywall or metal.

- Can be used wet or dry
- 3-7/8" long x 2-5/8" wide x 1" thick

GRIT	ITEM	PRICE
Coarse	46751-2SMA	\$2.49 \$2.49
Medium	46752-2SMA	\$2.49 \$2.49
Fine	46753-2SMA	\$2.49 \$2.49

BISCUIT JOINER WITH TILTING FENCE

- 120V, 6.8 amp motor
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 - Sealed ball bearings for extended life
 - Convenient biscuit adjustment dial
 - Die-cast aluminum fence tilts from 0-90°
 - Soft rubber grip handle
 - 4", 6 tooth blade with carbide tips
- Biscuit settings: 0, 10, & 20; Fence adjustment: 1" to 3"; Maximum depth of cut: 0.63"; Shipping weight: 10.30 lbs.

~~\$69.99~~ **\$49.99**

ITEM 47377-3SMA

4", CARBIDE TIPPED BISCUIT JOINER BLADE

ITEM 47401-1SMA

~~\$5.99~~ **\$5.99**

DRILL 28 HOLE SIZES!

3 PC. TITANIUM NITRIDE COATED M2 HIGH SPEED STEEL STEP DRILLS

This compact set replaces 28 individual drill bits. Titanium nitride coating for cooler running.

- Automatically deburrs holes
 - Quick-change 1/4" hex shank
 - M2 high speed steel for long life
 - Wood presentation case
- 3/16" to 1/2" Six Step Bit (3/16", 1/4", 9/16", 3/8", 7/16", 1/2"); 1/4" to 3/4" Nine Step Bit (1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4"); 1/8" to 1/2" Thirteen Step Bit (1/8", 5/32", 3/16", 7/32", 1/4", 9/32", 5/16", 11/32", 3/8", 13/32", 7/16", 15/32", 1/2")

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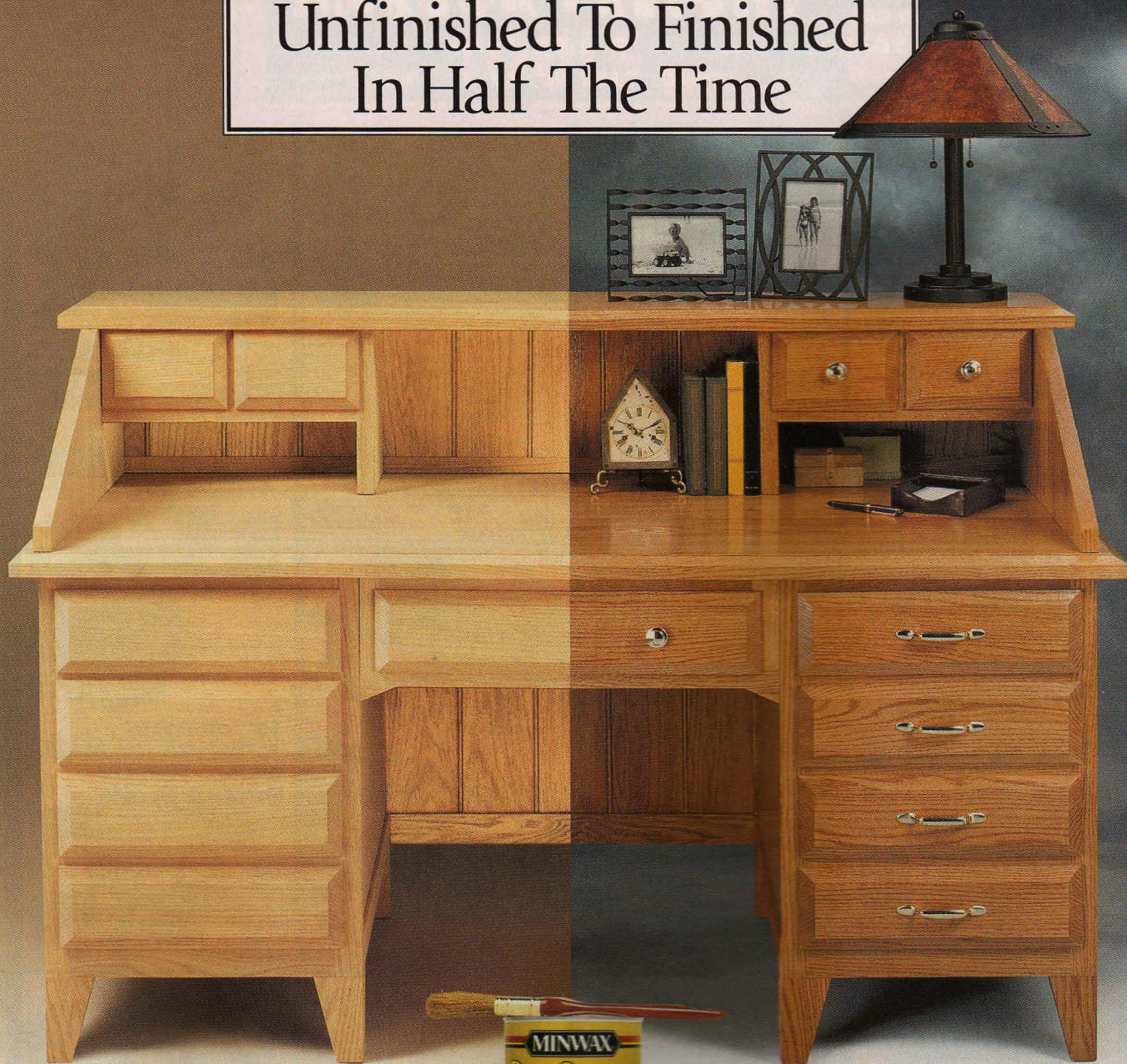
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#107, May 2004

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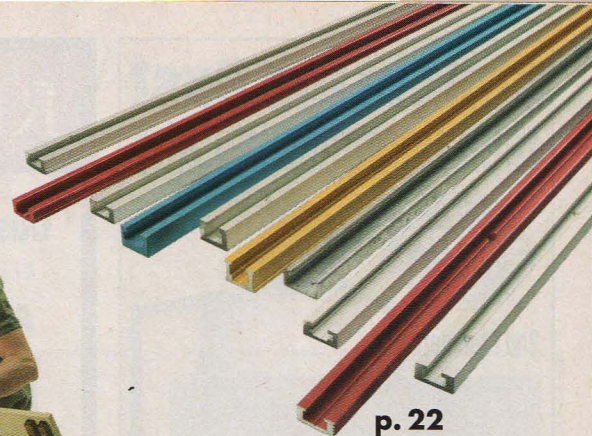
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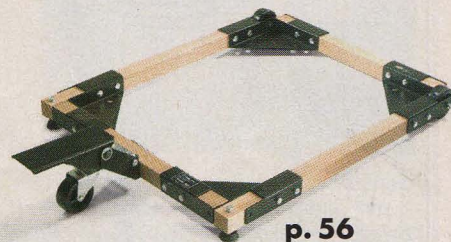
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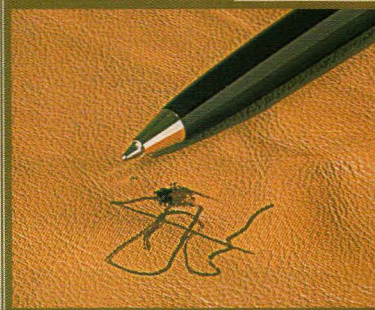
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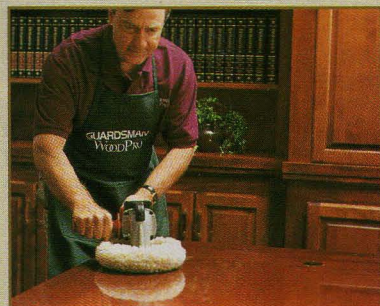
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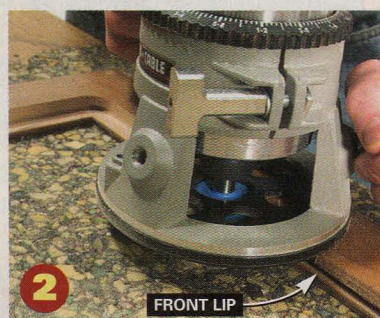
Question & Answer

Replacing Wood Panels With Glass

Q. I'd like to replace some of the paneled wood doors in my upper kitchen cabinets with glass. Is it possible to use the existing frames?



Remove the wood panel remnants from the door frames with a pair of pliers. Make a few relief cuts in the panel to aid removal. A blanket keeps the door-frame finish from getting scratched.



Route a rabbet in the back of the door frame. The bearing rides on the front lip of the groove. Use a chisel to square the corners after routing.



Nail in retainer strips to hold the glass in place. Pre-drill holes and tap in 18-gauge brads with a hammer. A piece of cardboard protects the glass from damage.

A. Sure, the trick is to remove the wood panels without disturbing the integrity of the frames. Start by drilling four holes in the panel corners. Use a jigsaw to cut out most of the panel, then pull the remnants from the frame (Photo 1). Sometimes, panels are spot glued or tacked in place. In that case, you'll need needle-nosed pliers or a "beater" chisel to dig out the brads or glue. Next, use a rabbeting bit to remove the back lip of the panel groove (Photo 2). Bring the frames to your local hardware store and have glass cut to fit. Make retainer strips out of the same wood as the door. Finish the strips and the newly machined rabbet to match the door, because they will be visible through the glass. Finally, install the glass (Photo 3). Now your plain old kitchen uppers are elegant display cabinets

(see below), all for the cost of a couple pieces of glass.



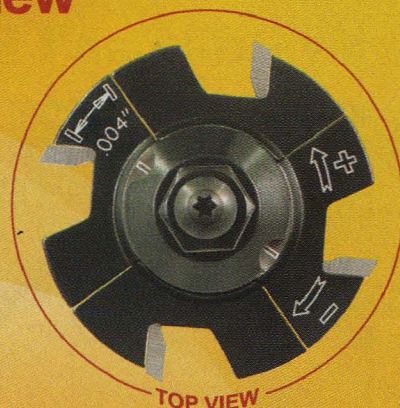
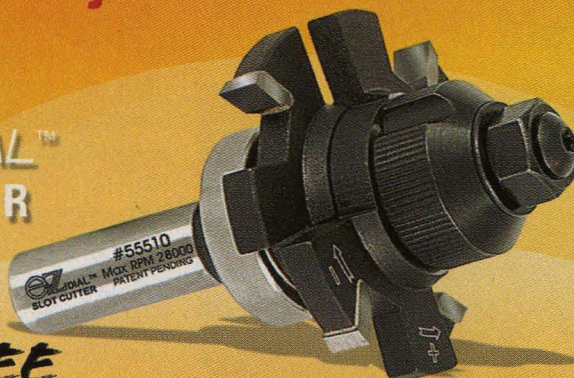
Source

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*658030-AK	8	24	5/8	\$286.80	\$159.95
658040	8	46	5/8	\$365.20	\$189.95
658040-1	8	46	1	\$365.20	\$199.95
†651030	10	24	5/8	\$352.80	\$185.95
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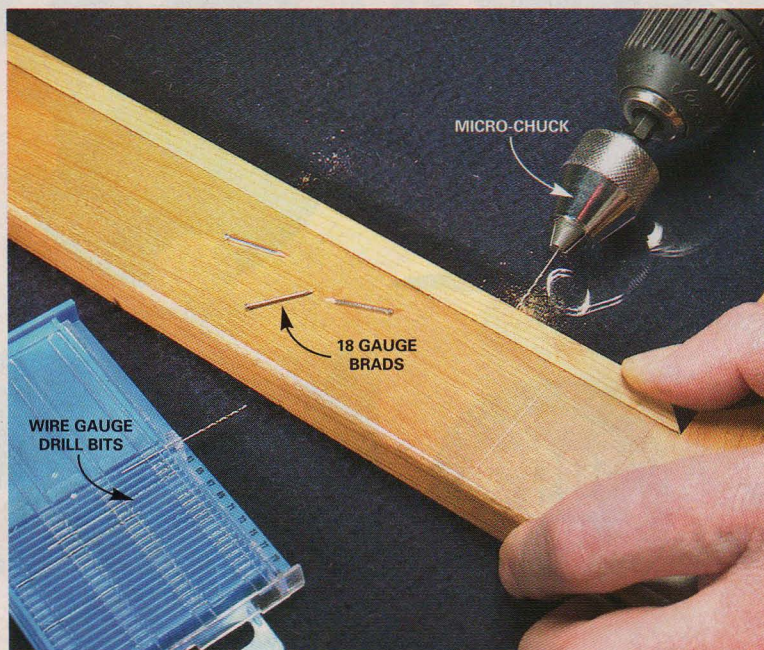
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Question & Answer

My Drill Can't Hold a Small Bit



Q. I've found 1/16-in. pilot holes are too big for 18-gauge brads. I bought a set of those tiny wire gauge bits only to find my drill chuck can't tighten down far enough to grab them. Now what?

A. What you need is a micro-chuck designed to hold miniature drill bits. We tried a number of these little bits. The one we liked best sells for under \$7 (see Source below). It held the bits firmly and it had a large chuck with a knurled surface that was easy to tighten by hand.

For \$7 you're not going to get precision machining. All the chucks had some wobble yet we didn't break a single bit, even when we drilled the almost-invisible No. 80 into solid oak. Just take it easy; it takes almost no pressure to drive these bits.

Source

Rockler, (800) 279-4441, www.rockler.com

3-Jaw Micro Chuck, #69023, \$7

20-Pc. Wire Gauge Drill Set, #69946, \$7.

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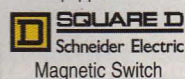


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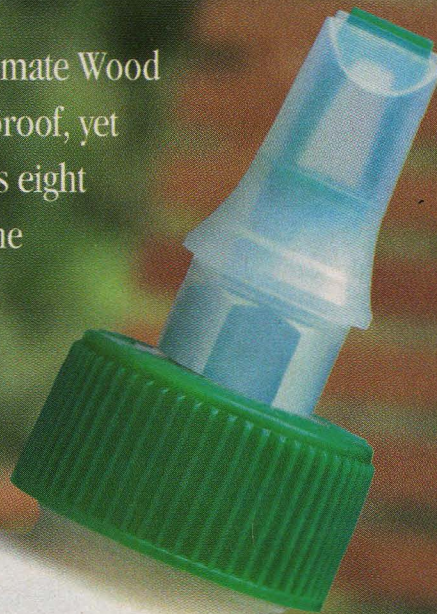
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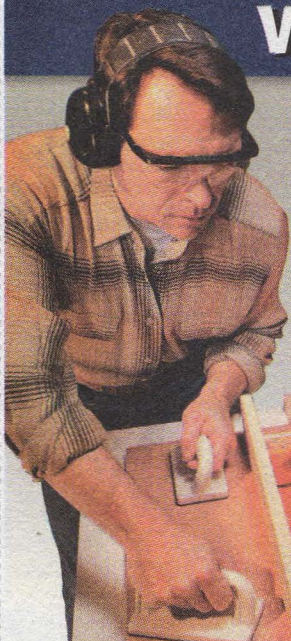
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Question & Answer

Is It Okay To Store Wood in an Unheated Space?

Q. I only heat my garage shop when I'm using it. Is it okay to store my kiln-dried hardwood in my unheated garage?

A. It's okay to store wood in an unheated garage for short periods of time. However, after only a few months, you could end up with significant changes to the moisture content of your wood.

If you must store wood in an unheated space, you can do a few things to slow the moisture uptake:

1. Flat stack the lumber to minimize exposure of the boards to the air.
2. Seal the end grain of the boards.
3. Use blocks to keep the stack off a concrete floor.

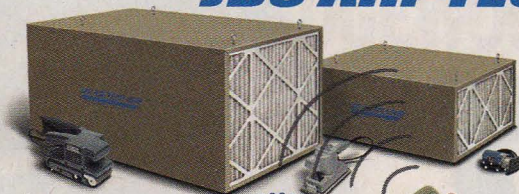
Be sure to bring your wood into a heated space a few weeks before you use it. As crazy as it sounds, I know woodworkers who stack wood under their beds before they build with it. As always, it pays to check your wood with a moisture meter before you use it.



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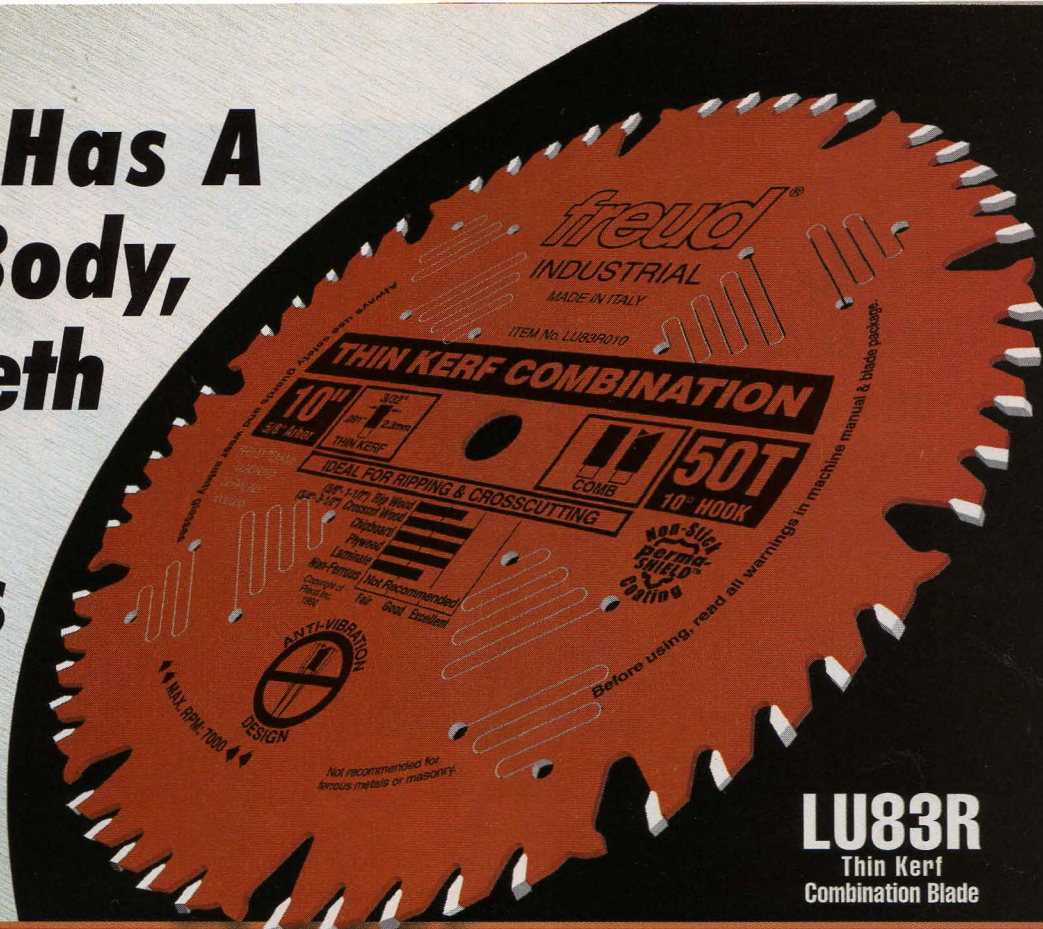
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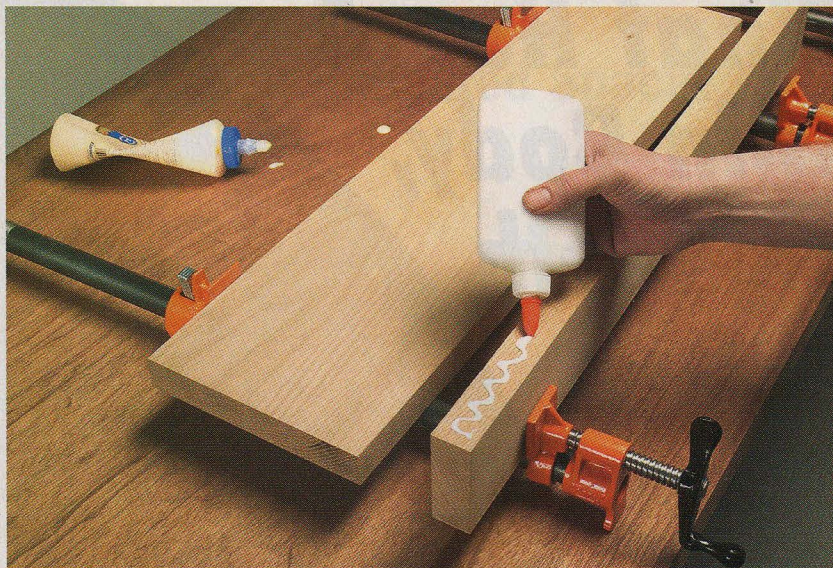


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Can I Use White Glue for Woodworking?

Q. In a desperate moment, I grabbed some white glue to finish a glue-up. I've heard white glue works just as well as yellow. Is this true or am I going to regret my rash act?

A. White glue is plenty strong for woodworking. Yellow glue has certain advantages: It's thicker so it's less messy and it has a higher melting point so sandpaper won't gum up as fast. Also, cured white glue is more flexible than yellow, which can lead



to a condition called glue "creep." As solid wood expands and contracts, the flexible white glue can push up in visible ridges. For this reason, white glue is best used where glue creep won't matter, like on interior parts of a

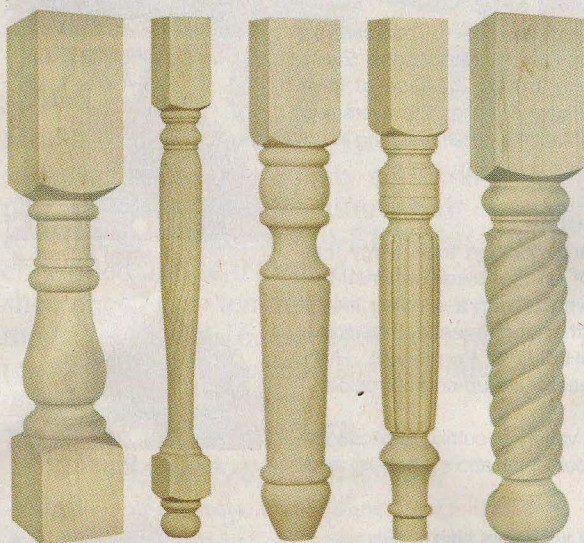
cabinet, inside a dado or rabbet or with manufactured sheet stock where wood movement is not an issue.

Avoid using "school" glues, because some brands have about one-third the bond strength of yellow glues. **AW**

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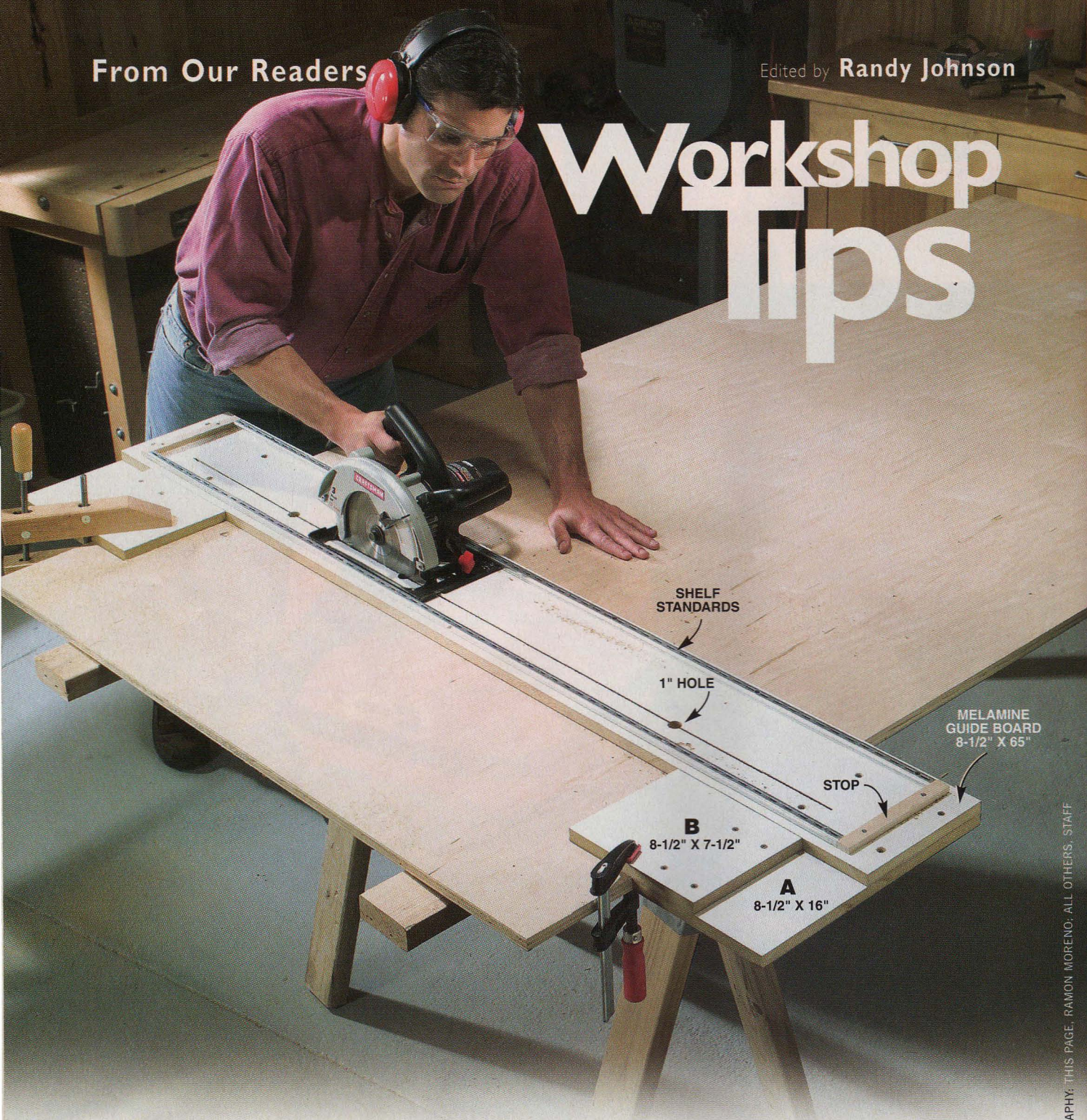
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Workshop Tips



Plywood Crosscut Guide

I use this jig, which I made from leftover materials, to cut plywood into manageable sizes. Melamine provides a slick surface for the saw to ride on and shelf standards guide the saw base in a straight line.

The stops at the end of the guide keep me from sawing too far. Two boards (A) help square the guide on the sheet of plywood, but I still double-check the guide's position

by sighting through the 1-in. holes to make sure the saw blade lines up with my pencil line. Two more boards (B) hook over the top of the plywood and provide a simple way to secure the guide to the sheet of plywood.

Allen Hatcher

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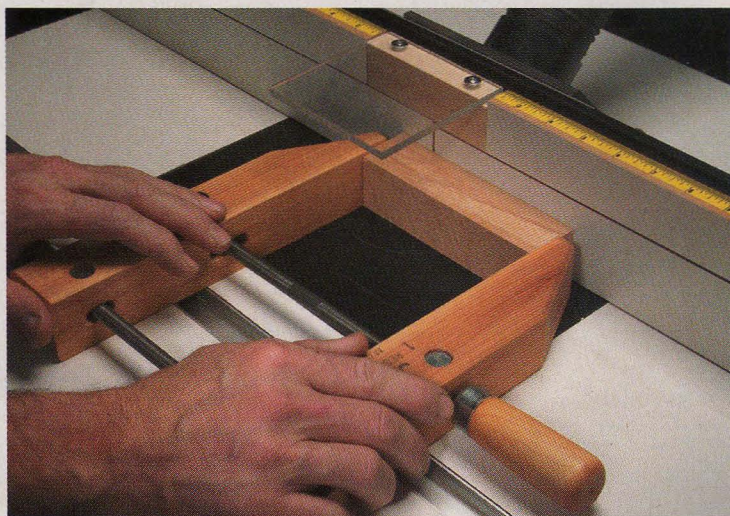
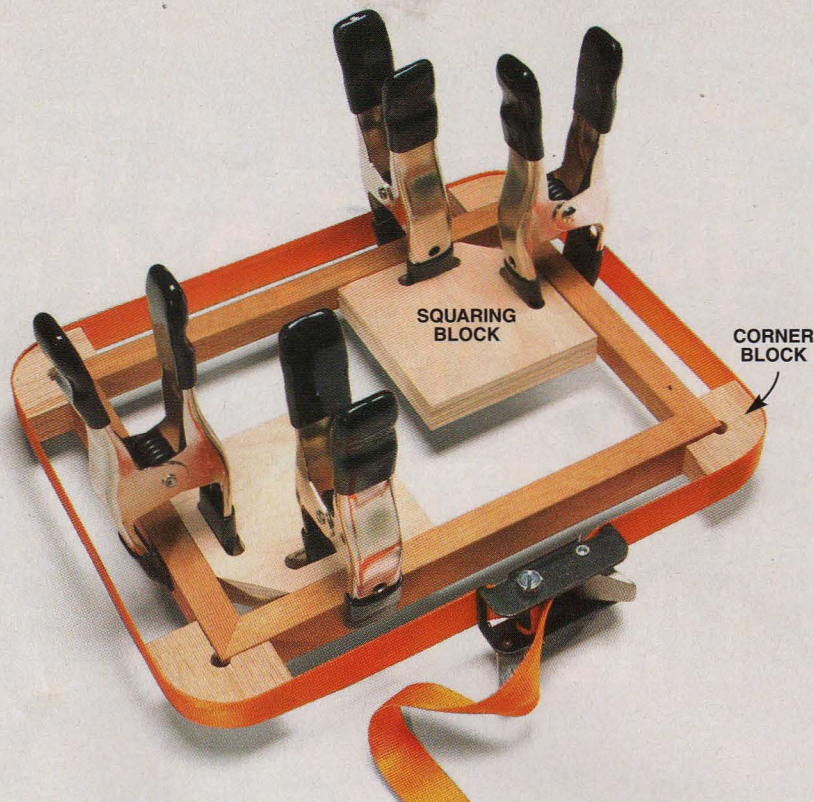
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I love making small picture frames but I had a problem keeping them square during clamping. I fixed my problem by making a pair of squaring blocks that I spring clamp to the inside of the frame parts before adding the band clamp. I also use outside corner blocks, which keep the band clamp away from the spring clamps and focus the clamping pressure at the corners, where it's most needed.

Frank Kawasaki



Safer Small-Parts Routing

When I have to rout a small part on my router table, I reach for a hand screw clamp. It holds the workpiece securely, keeps my hands a safe distance from the router bit and serves as a pair of handles for pushing. It also provides much better control than a pair of push sticks.

Paul M. Jayko

Vacuum Glue into a Crack

Last fall while moving into a new house, I dropped my kitchen table off the back of my pickup truck.

The solid oak top suffered a serious crack near one corner. I figured some glue and a clamp would take care of it, but the crack was narrow and the glue didn't want to flow into it. Some quick thinking provided the perfect solution: I used my shop vacuum to suck the glue down into the crack. Wow, did that work well! I had the clamps on in no time and wiped off the excess glue. Once it was dry, the crack was my little secret.

Chris Evans



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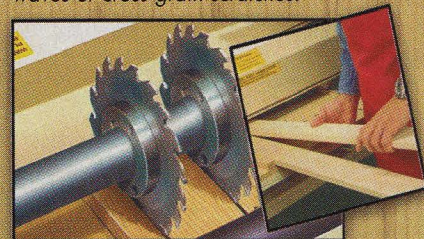
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Workshop Tips



Chair Leg Repair

My kitchen chairs are hardly valuable antiques, so when I broke a rung on one I wanted a strong but simple fix. I drilled out the broken tenon from the mortise and plugged it with a piece of wood. Then I trimmed off the end of the broken tenon on the stretcher and drilled a 1/4-in.-dia. by 1-in.-deep hole into the end. I epoxy glued a 1-3/4-in. piece of threaded rod into this hole. Then I drilled out a corresponding hole into the wood plug and epoxy glued the threaded rod into the wood plug. Epoxy glue is a great gap-filling glue, which means the alignment of the threaded rod doesn't have to be perfect. This fix may seem a bit rough, but it works, and besides—this chair will never be on "Antiques Roadshow."

Bruce Wedlock



Ribbed Saw Table Fillers

I like my contractor's saw just fine, except for the ribbed extension tables. The openings can be a real finger pincher when sliding the rip fence across them. After my last bruised fingernail I decided to do something about it. I custom fit some 1/4-in.-thick plywood and attached it to the ribs with construction adhesive. You may have more or less space on your tablesaw than I do, but a little shimming or sanding should give you the fit you need.

Jonathan Uecker

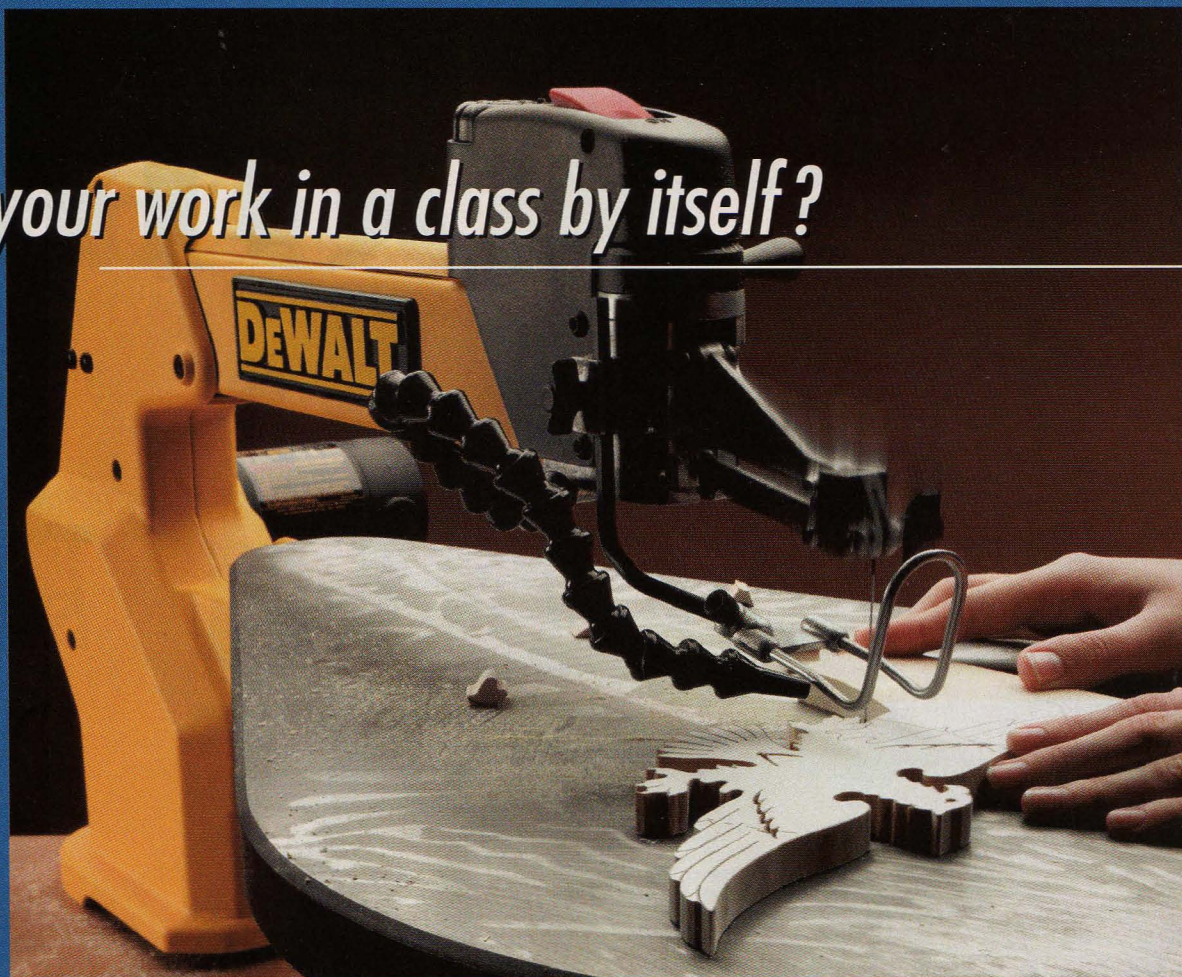
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Tool Talk

By Randy Johnson

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T-Track

*They may all look similar,
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T-track is a versatile product that has many great uses around the shop. It can be attached to the fence of a chop saw, drill press or router table to provide a quick, secure place to attach feather boards, stops and hold-downs. It also makes a great addition to jigs and fixtures with parts that need to be adjustable or easily removed.

At first glance, all T-tracks look pretty much the same. There are, however, several subtle but important differences among brands. We bought eleven brands commonly available and put them to the test to see which ones we liked best.

Sizes and Prices

T-track is available in lengths from 1 ft. to 12 ft. and averages about \$4.50 per lineal foot. It is usually sold in 1- or 2-ft. increments, but some brands can be special ordered to a specific length. Most T-tracks are approximately 3/4 in. wide with a thickness of either 3/8 or 1/2 in. (see Chart, pages 30–31). All but one are made of extruded aluminum.

Features We Like

Accepts Standard Hardware

T-tracks that accept standard hex head bolts and nuts as connectors are a big plus (Photos 1 and 2), because standard nuts and bolts are readily available at hardware stores. This means you won't get stuck in the middle of a project because you don't have the right connector. Some T-tracks require special connectors that are only available from one supplier.

Pre-drilled for Easy Mounting

We prefer T-tracks that are pre-drilled and countersunk to accept No. 6 or bigger wood screws (Photo 3). It's also nice to have screw holes spaced no more than 5 in. apart. Closely spaced holes mean more holes for more mounting screws and less risk of pulling the T-track off the mounting surface. Also, if you need to cut the T-track shorter, you will still have a hole near the end.

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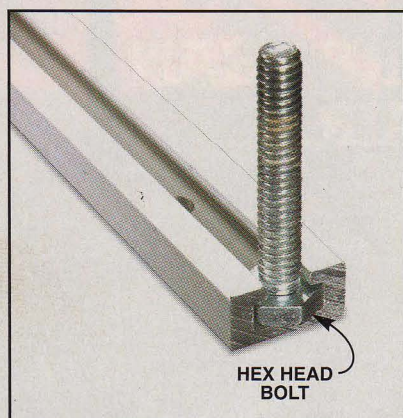
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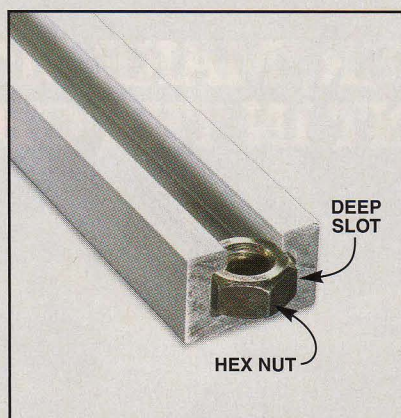
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Tool Talk

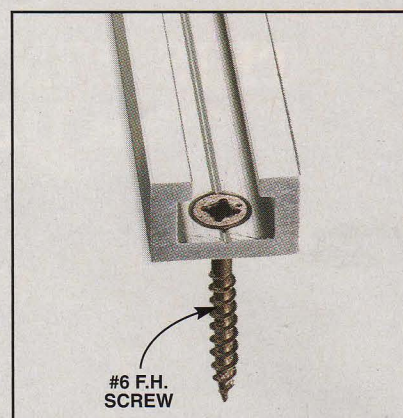
Features We Like



1 We like T-track that accepts the hex head of a standard bolt. It will save you from having to buy the special connectors that some tracks require.



2 Some T-tracks have a deep slot. It's deep enough to accept a hex nut and is a feature that will increase your connecting and fastening options.



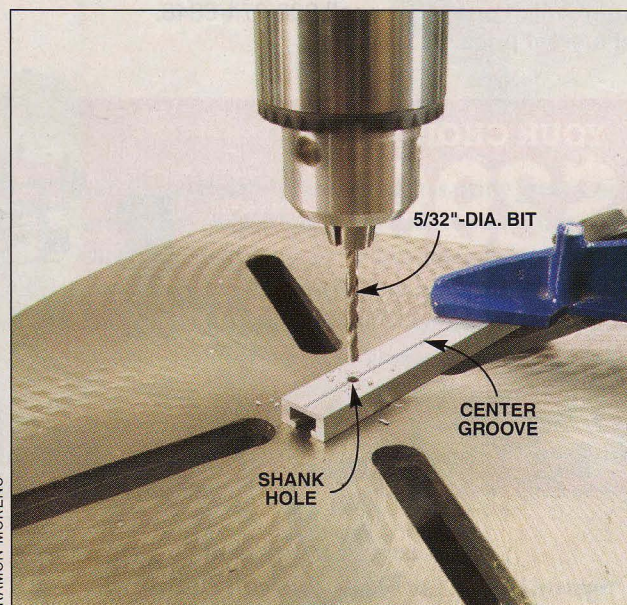
3 T-tracks pre-drilled to accept No. 6 or larger screws have better holding strength than the tracks that are drilled for No. 4 screws.

If you need to add screw holes to a T-track, you can drill them yourself. It's a bit of a hassle but not difficult (Photos 4 and 5). Some T-tracks even come with a groove to help you center the drill bit. A groove on the bottom is best because drilling the shank hole from the top leaves a burr on the bottom that must be removed with a file.

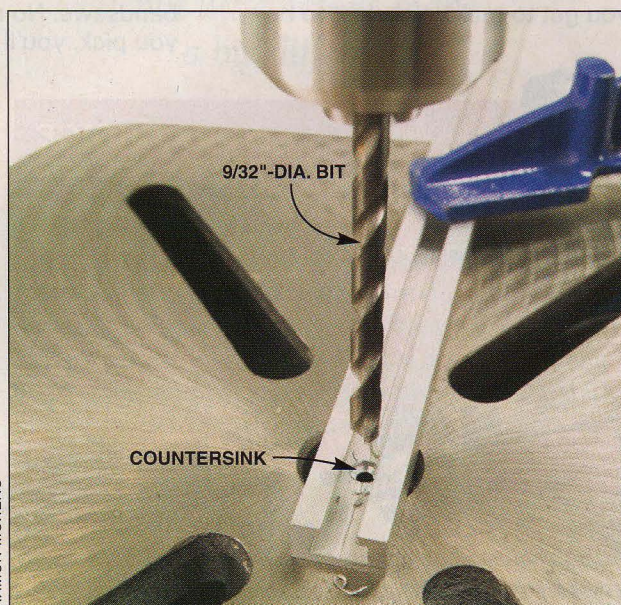
Grooved for Glue

Glue grooves or lips on the sides of T-tracks provide a mechanical bond when gluing a T-track into a dado (Photos 6 and 7). Gluing is the best way to mount a T-track in a dado when the material below the dado is too thin to hold screws.

Drilling T-Track



4 Drill the shank hole from the bottom of the T-track with a 5/32-in.-dia. bit. Some T-tracks have a groove to help center the bit; it's helpful but not essential. A pencil line and center punch also work well.



5 Make the countersink for the screw head with a 9/32-in.-dia. drill bit. Make the countersink just deep enough so the screw head is flush with the inside of the T-track. Setting the depth stop on your drill press will prevent you from drilling too deep.

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Tool Talk

Undrilled T-tracks have one advantage here: There are no screw holes for glue to squeeze up through. If your T-track has screw holes, just cover the holes on the bottom side with small pieces of masking tape before gluing.



GLUE GROOVES

6 Glue grooves or lips on the sides of T-tracks help lock the T-track into the dado.



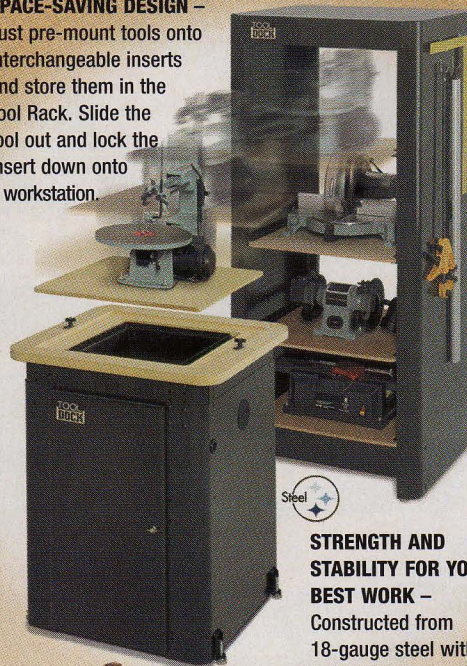
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Fits in a Miter Slot

Some T-tracks will fit into miter slots on tablesaws, bandsaws and router tables (Photo 8). Some T-tracks can be used with the slot up or down, while others must be one way or the other to get a good fit.

The 3/8-in.-thick tracks are the best choice for use in miter slots. Thicker tracks will extend above the miter slots and you will have to cut a dado in the bottom of the jig you are making.

Specialty T-Track

Many woodworking tool and supply companies also sell a variety of special-application T-tracks. Some have multiple slots, unique shapes or even a built-in tape measure. One type is the miter-slot T-track, which is designed to accept the bar of a standard miter gauge.

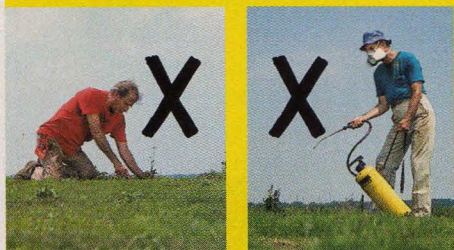
In addition to these specialty T-tracks, a huge selection of ready-made jigs and fixtures is available that you can add to your T-tracks. For more information on specialty T-tracks and T-track accessories, contact the companies listed in the Chart, pages 30–31.

Our Picks

We gave our top rating to two T-tracks. They both share some of the best features we liked, yet each stands out for a unique feature of its own. We didn't pick any Best Buys because T-track is all so similarly priced.



Watering chores, water bills! Sweating behind a roaring mower!
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Amazoy is the Trade Mark registered U.S.
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Mow your zoysia lawn once a month—or less! It rewards you with weed-free beauty all summer long.

7 Ways Your Zoysia Grass Lawn Saves You Time, Work, and Money!

1 CUTS WATER BILLS AND MOWING AS MUCH AS 2/3

Would you believe a lawn could be perfect when watered just once? In Iowa, the state's biggest Men's Garden club picked a zoysia lawn as "top lawn—nearly perfect." Yet, this lawn had been watered only once all summer to August!

In PA, Mrs. M.R. Mitter wrote "I've never watered it, only when I put the plugs in...Last summer we had it mowed 2 times...When everybody's lawns here are brown from drought, ours stays as green as ever." *That's how zoysia lawns cut water bills and mowing! Now read on!*

2 ENDS RE-SEEDING NEVER NEEDS REPLACEMENT

Plug in your zoysia grass and you'll never have to spend money on grass seed again! Since you won't be buying seeds, you won't need to dig and rake—then hope the seeds take root before birds eat them or the next hard rain washes them away.

3 NO NEED TO DIG UP OLD GRASS

Plant Amazoy in old lawn, new ground, whatever. Set 1" square plugs into holes in the soil 1 foot apart, checkerboard style. Plugs spread to drive out old, unwanted growth, weeds included. Easy instructions with your order. If you can put a cork into a bottle, you can plug in Amazoy.

4 FOR SLOPES, PLAY AREAS, AND BARE SPOTS

You can't beat Amazoy as the low cost answer for hard-to-cover spots, play-worn areas, or to end erosion on slopes.

Endless Supply of Plug Transplants

Transplant plugs from established Amazoy as you desire—plugged area grows over to provide all the plugs you'll ever need.

FREE! Exclusive Step-on Plugger with orders of 625 plugs or more.

Starting your lawn is easy with this sturdy, 2-way plugger. Cuts away unwanted growth as it digs holes for plugs. Saves bending, time, work. Invaluable transplant tool.

5 IT STAYS GREEN IN SPITE OF HEAT AND DROUGHT

"The hotter it gets, the better it grows!" Plug-in zoysia thrives in blistering heat, yet it won't winter kill to 30° below zero. It just goes off its green color after killing frosts, begins regaining its green color as temps. in the spring are consistently warm. Of course, this varies with climate.

6 NO NEED TO SPEND MONEY ON DANGEROUS CHEMICALS

Since zoysia lawns resist insects AND diseases, you avoid the risk of exposing your family or pets to weedkillers and pesticide poisons. Plug in Amazoy and save the money, avoid the risks!

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☐ 625 PLUGS + 125 FREE with FREE Plugger ONLY \$31⁹⁵ + \$11.85 S&H	☐ 1,000 PLUGS + 200 FREE with FREE Plugger ONLY \$45⁹⁵ + \$17.15 S&H	SPECIAL OFFER! ☐ 2,000 PLUGS + 400 FREE with FREE Plugger ONLY \$74⁹⁵ + \$23.15 S&H	
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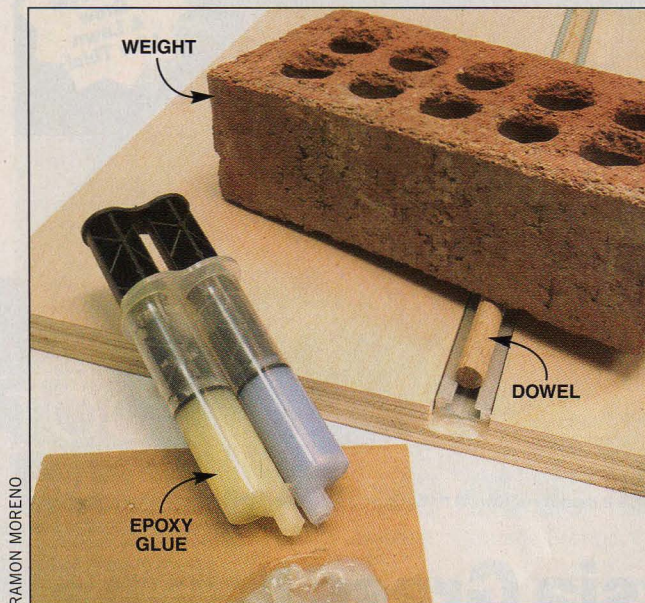
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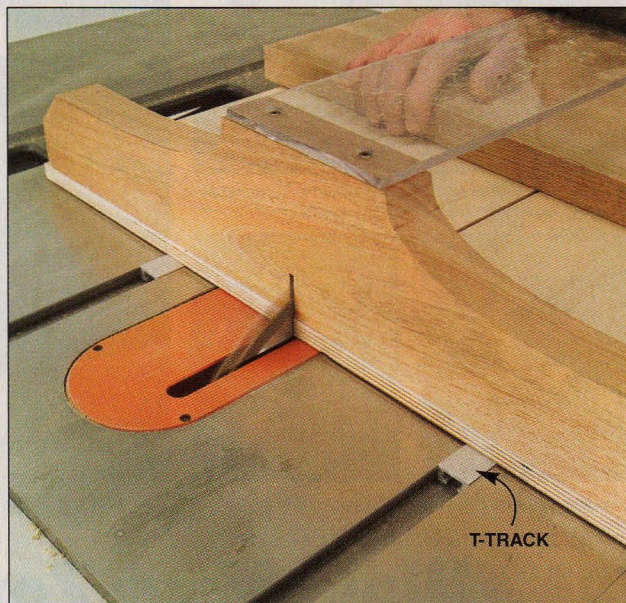
3617 Old Taneytown Rd., Taneytown, MD 21787

Tool Talk



RAMON MORENO

7 Hold the T-track in place with a dowel and some weight when gluing it into a dado. Epoxy is the glue of choice because it bonds to both wood and metal and is readily available at hardware stores. Use an epoxy that takes at least 15 minutes to set, so you don't have to rush.



RAMON MORENO

8 T-tracks that fit into miter slots make handy runners for sleds or jigs. They should slide easily but snugly.

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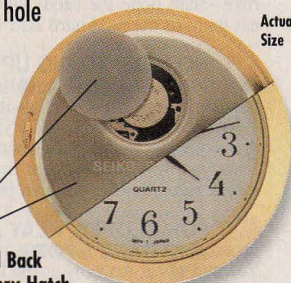
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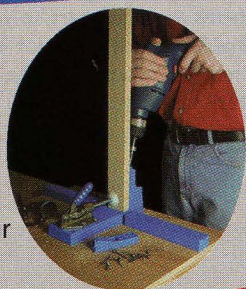


POCKET HOLE SYSTEMS

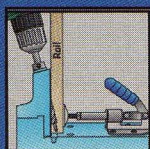
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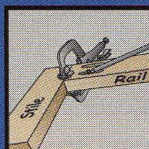


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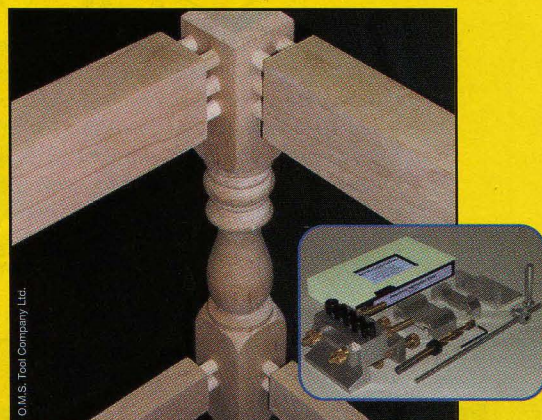
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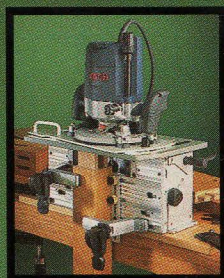
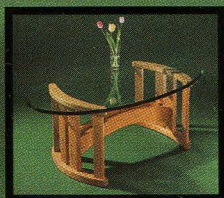
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Tool Talk

#8 SHANK HOLE

DEEP SLOT

RECESSED BOTTOM



Editors' Choice Incra T-track

The Incra T-track has a lot going for it. We particularly liked its unique recess at the bottom. It allows you to use No. 8 pan head screws for easy, very secure mounting. The pre-drilled screw holes are 3 in. apart so you should never have to drill additional holes. The deep slot will accept both standard 1/4-in. hex head bolts and nuts. The track has ridges on the sides that add holding strength if you glue the track into a dado.

Brand	Model name	Price range	Length	Outer track dim. H x W	Accepts head bolts	Accepts hex nuts	5 in. or less between screw holes
	FasTTrak Minitrack	\$7-\$15	12" 24" 36" 48"	3/8" x 3/4"	Y 1/4"	N	N 8"
	Incra T-track regular	\$7-\$16	18" 24" 36" 48"	1/2" x 3/4"	Y 1/4"	Y 1/4"	Y
	MLCS T-track	\$13-\$19	24" 36" 48"	3/8" x 3/4"	Y 1/4"	N	Y
	Might-T-Track Heavy duty T-track	\$13-\$45	24" 48" 96"	5/8" x 7/8"	Y 3/8"	N	Y
	Might-T-Track Mini-T-Track	\$10-\$40	24" 48" 96"	3/8" x 3/4"	Y 1/4"	N	Y
	Woodstock International T-slot track	\$3.50-\$8	12" 24" 36"	3/8" x 3/4"	N	N	not drilled
	Hartville Tool Utili Trak	\$4-\$9	12" 24" 36"	3/8" x 3/4"	Y 1/4"	N	N 7" o.c.
	Rockler T-track	\$7-\$13	24" 36" 48"	1/2" x 3/4"	N	N	N 15" o.c.
	Lee Valley/Veritas T-slot extrusion	\$9-\$16.50	24" 48"	3/8" x 3/4"	N	N	not drilled
	Woodturners Inc. T-track	\$9-\$15	24" 36" 48"	1/2" x 3/4"	Y 1/4"	Y 1/4"	Y
	Woodworker's Supply T-slot channel	\$9	48"	7/16" x 13/16"	Y 3/8"	N	not drilled
	The Woodworker's Choice T-track	\$12-\$18	24" 48"	1/2" x 3/4"	Y 1/4"	Y 1/4"	Y



#8 COUNTERSINK

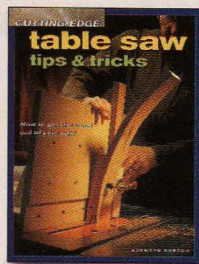
LIP

GLUE GROOVES

Editors' Choice FastTrak Minitrack

FasTrak's Minitrack has a lip on one edge that makes it slightly over 3/4 in. wide, but the lip can be filed for a perfect fit in a miter slot. The lip and the grooves on the other side provide a positive bond if you want to glue the track into a dado. The track comes drilled for No. 8 flat head screws, so you can use a standard sheetrock screw to mount it. Drilling the larger hole does cause divots along the slot of the track, but the divots didn't cause any problems with the connectors or jigs we tried in the track. This track's 3/8-in. thickness makes it a good choice if you need to install a dado in 3/4-in. material. **AW**

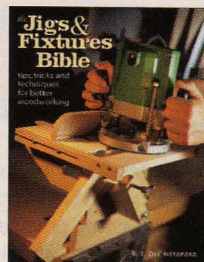
Drilled for #6 screws or bigger	Grooved on bottom for drilling	Grooved or lipped for gluing	Fits in a miter slot	Notes	Manufacturer contact information
Y	N	Y	Y with slot down	Custom lengths to 96" and custom drilling available. Also available without side lip.	(888) 536-1870 www.prairieriverwoodworking.com
Y	N	Y	N	Drilled for No. 8 pan head screw.	(972) 242-9975 www.incra.biz
N	Y	N	Y	Drilled for No. 4 flat head screws.	(800) 533-9298 www.mlcswoodworking.com
Y	N	N	N	Made of 90% recycled aluminum. Drilled for No. 4 flat head screws.	(888) 512-9069 www.ttrackusa.com
N	Y	N	Y	Made of 90% recycled aluminum. Drilled for No. 4 flat head screws.	(888) 512-9069 www.ttrackusa.com
not drilled	N	Y	Y with slot up		(800) 523-4777 www.grizzly.com
Y	N	Y	Y		(800) 345-2396 www.hartvilletool.com
Y	N	N	N		(800) 279-4441 www.rockler.com
not drilled	Y	N	Y		(800) 871-8158 www.leevalley.com
Y	N	N	N	Custom length available up to 144".	(877) 603-9663 www.woodturners.on.ca
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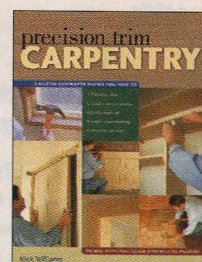
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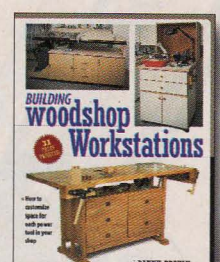
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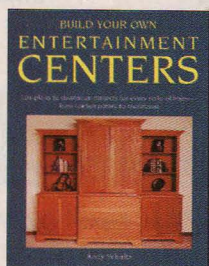


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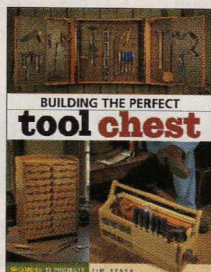


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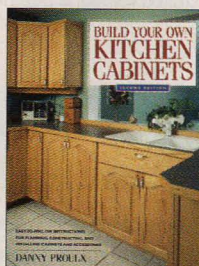
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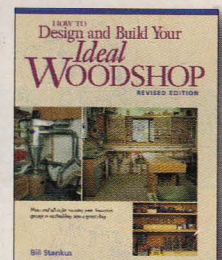
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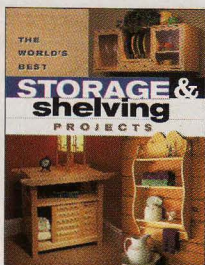
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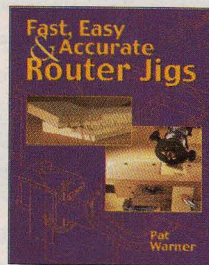
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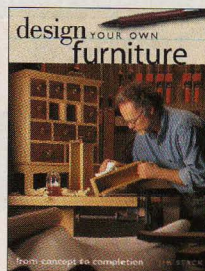
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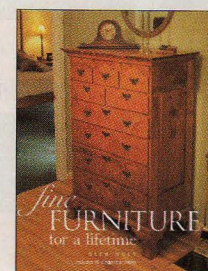
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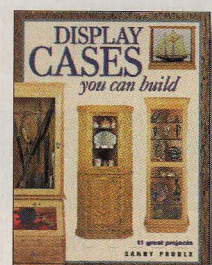
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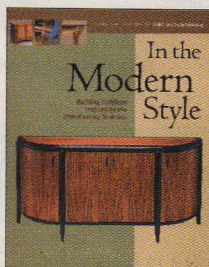
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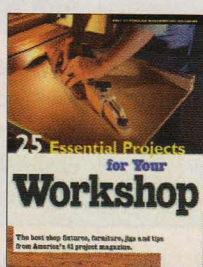
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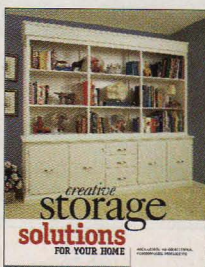
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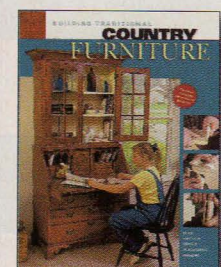
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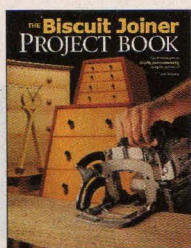
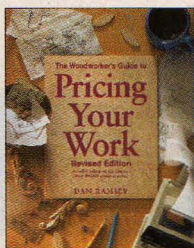
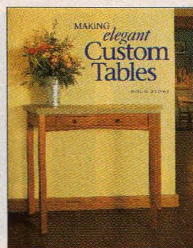
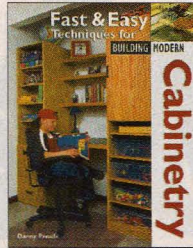
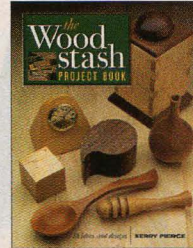
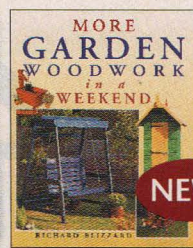


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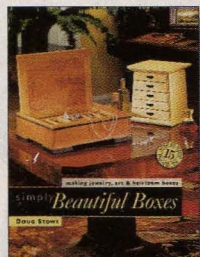
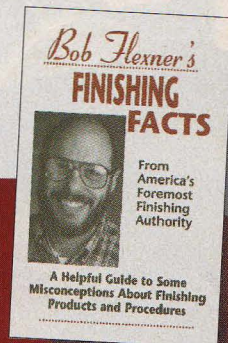
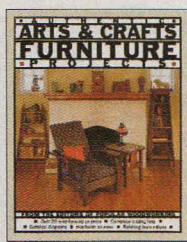
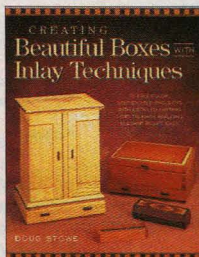
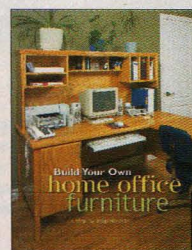
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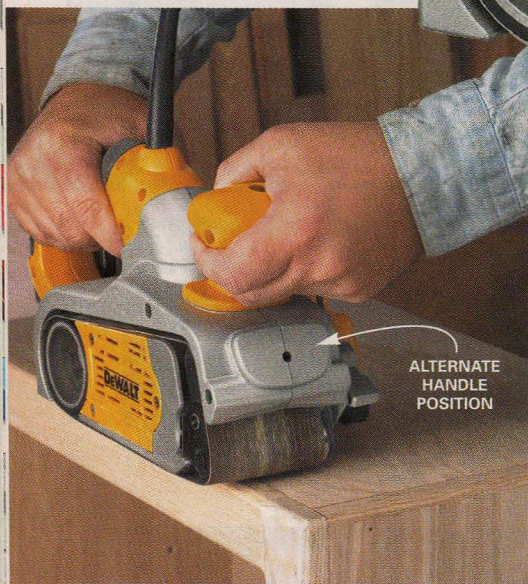
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The Well-Equi

By George Vondriska



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Beguiling Belt Sander

DeWalt's new 3 x 21-in. belt sander is a joy to use, whether you're flattening a panel or scribing a face frame. It has an unusual three-wheel design that positions the motor lower in the machine, improving its balance. According to DeWalt, this sander also has the longest platen of any sander in its class, which further improves its stability.

The DW433's \$180 price tag, 12-lb. weight and 8-amp motor are comparable to other 3 x 21-in. machines. But this sander has something most others don't: electronic variable speed (EVS). EVS enables the sander to maintain speed under any type of load.

The front handle can be used in two positions. The forward position keeps your hands low for even better balance. The top position allows the sander to snug up to an inside corner. The sander includes a dust bag, but you'll need an adaptor, \$12, to change the rectangular opening to a 1-1/4-in. round if you want to connect to a vacuum hose.

This machine can also be turned into a stationary sander by mounting it in a special frame (\$70). This frame is really handy when working on small parts. The belt can be either vertical or horizontal.

Source

DeWalt
(800) 4-DEWALT, www.dewalt.com
Sander, DW433, \$180
Adaptor, DW4050, \$12
Sanding frame, DW4055, \$70
Sander with frame, DW433KT, \$220.

pped Shop

New Tools, Supplies and Materials

Expanded Cordless Kit

Six separate cordless tools can cost a bundle, but you sure save a lot when you buy them together as a kit. That's because they all share the same two batteries and charger.

Delta's value-priced 18-volt kit has two new additions: a jigsaw and a brad nailer. For \$280 you also get a drill/driver, circular saw, jigsaw, orbital sander and flashlight. Short a router, that's nearly every portable power tool you need for woodworking. With this kit, you can cut, drill, drive, nail, light and sand things anywhere around the house or shop.

The drill has a 1/2-in. keyless chuck, two speed ranges and a 24-position clutch. The circular saw cuts material up to 1-9/16 in. thick at 90 degrees. The base on the variable speed jigsaw tilts 45 degrees both left and right. The orbital sander uses a standard one-third sheet. The brad nailer drives 18-gauge brads from 5/8 in. to 1-1/4 in. long.



PHOTO COURTESY OF MANUFACTURER

Source

Delta Machinery, (800) 223-7278, www.deltawoodworking.com
Delta Shopmaster Woodworker's Six Pack, #CL180VWVK, \$280.

Super Spokeshave

Spokeshaves are a pleasure to use at the bench. You can smooth curved parts that are rough cut on a bandsaw or put those final hand-sculpted touches anywhere on a piece of furniture. A spokeshave can be pushed or pulled and take off light or heavy shavings. It's one of my favorite hand tools.

Spokeshaves are so ancient that Noah probably used one to build the ark. You might think there wouldn't be any room for improvement, but the new Veritas spokeshave (\$65) is a big step forward. In fact, it's leaps and bounds better than the commonly used Record A151 (\$25) and well worth the extra money. The Record requires quite a bit of tune-up and sharpening; the Veritas is practically ready to go right out of the box. It only needs a light honing.

Sharpening a spokeshave's blade has always been tricky because it's so short. The Veritas blade is made from A2 tool steel, which the manufacturer claims will stay sharp five times longer than a common carbon-steel blade. To minimize chatter (another frequent problem with spokeshaves), the Veritas blade is 1/8 in. thick and bedded on a huge support that's ground absolutely flat. Add rosewood handles and brass knurled knobs, and you've got one elegant tool!



MIKE KRIVIT

Source

Lee Valley, (800) 871-8158, www.leevalley.com
Veritas flat-bottomed spokeshave, #05P33.01, \$65
Round-bottomed spokeshave, #05P33.03, \$65.

The Well-Equipped Shop



Quick-Adjust Drawer Slides

Getting drawer fronts perfectly aligned inside a cabinet is now a lot easier, thanks to Accuride. Its updated 3832 series drawer slides include a clever cam-shaped adjustment device that gives you up to 3/16-in. wiggle room. Most slides have elongated slots for fussing with the fit, but cams are faster.

Here's how they work: Mount the slide hardware in the usual way, but only drive two screws into the drawer box. Push the drawer into the opening and check the gap around the front. If it's uneven, simply pull out the drawer



PHOTOS COURTESY OF MANUFACTURER

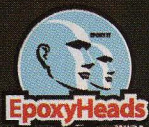
and turn a cam to move either side of the drawer front up or down. When the gaps are even, drive additional screws into the drawer box to lock it in place.

The 3832 slides are full extension and can take a 100-lb. load. The cam adjustment is also available on a variety of other slides for heavier loads or larger drawers.

Source

Accuride
(562) 903-0200, www.accuride.com
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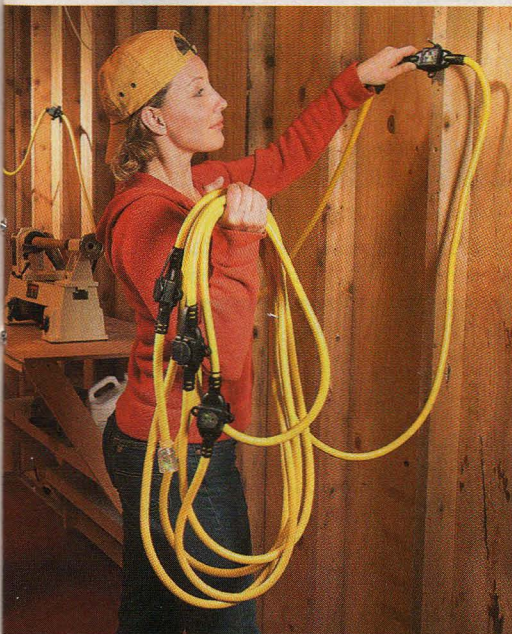
www.epoxyheads.com

Address: P.O. Box 2280 Bay City, MI 48707

Circle No. 10

Multi-Plug Cord

After pulling the cars out, I used to stretch extension cords all over my garage shop. But with my big feet, I kept tripping over those darned things. One day a neighbor heard my salty language and showed me the answer: the Herrington Multi-Outlet extension cord. Wow! What a difference.



BILL ZUEHLKE (2)

Outlets are spaced every 8 ft. on the cord. You can plug a tool in right where you're working. Best of all, the built-in mounting loops allow me to string the cord up on the wall. No more cords on the floor. Each outlet has a little green light that glows when the juice is on.

Source

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(800) 622-5221, www.HerringtonCatalog.com
25-ft., 14-gauge cord with three outlets,
#T112, \$30
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#T113, \$70.

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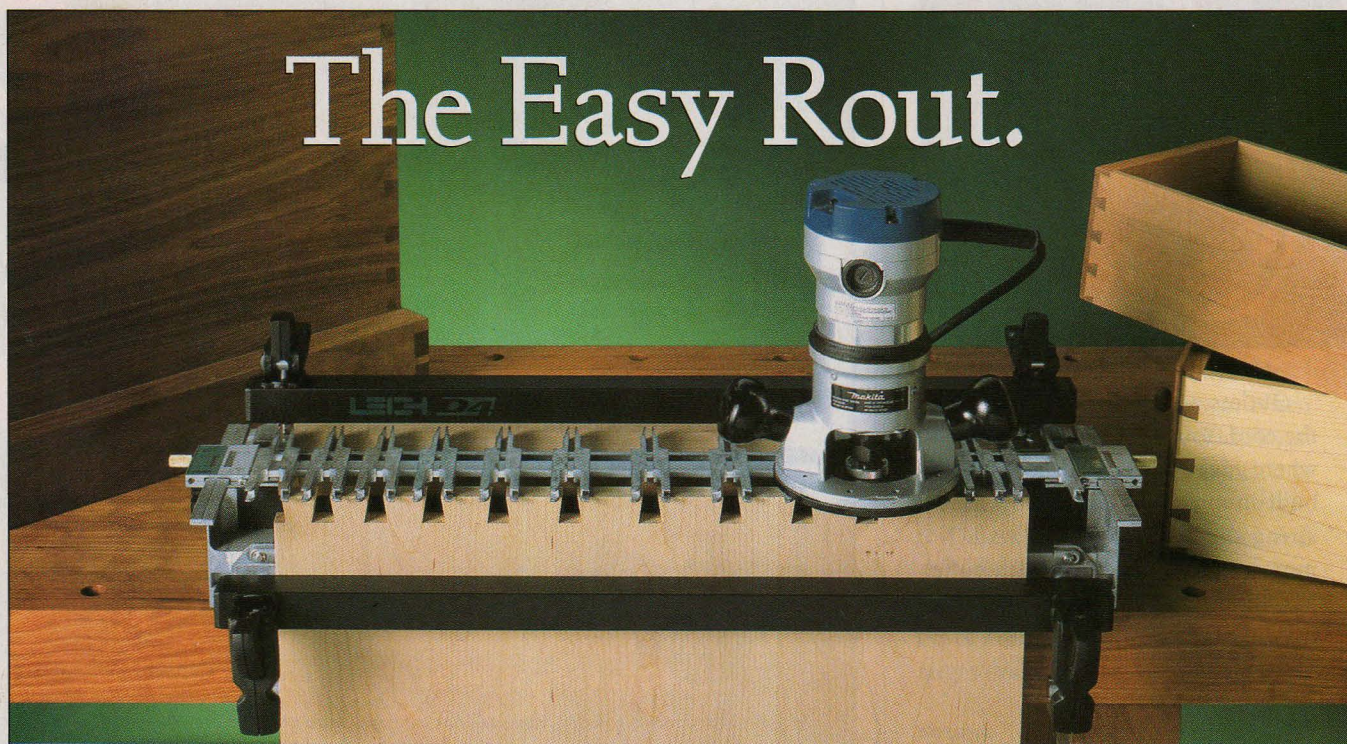
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Dovetail Jig	Buying Basics	Tool Test	Spec Chart
Drill Press		Tool Test	
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Dust Collector	Buying Basics		Spec Chart
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Jointer	Buying Basics		Spec Chart
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Planer	Buying Basics		Spec Chart
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Get in the zone with the mattress topper that molds to your body's contours

The Memory Foam Ultra mattress topper is cut into a grid pattern combining six different zones for variable support and a better night's sleep.

It's 3 a.m. You have exactly two hours until you have to get up for work, and you still can't seem to fall asleep. At this point, the phrase "tossing and turning" begins to take on a whole new meaning for people whose mattresses simply aren't giving proper support anymore. Your mattress may dictate your quality of sleep. Even if you merely suspect that your mattress may be outdated, that's when you need to take action. Some mattresses fail to support your spine properly, which can result in increased pressure on certain parts of your body. Other mattresses, sporting certain degrees of visco-elastic foam, can sometimes cost you well over \$1000. Now, one of the world's leading manufacturers of foam products has developed an incredibly affordable mattress topper that can actually change the way you sleep. Introducing the future of a better night's sleep: The Memory Foam Ultra mattress topper.

Sleep Better™...Wake up to a better morning. The Memory Foam Ultra mattress topper is designed to give you a better sleep surface. Not only does it support each region of your body, but it's also temperature sensitive. With its various-sized "comfort cells," the 2-inch thick Memory Foam

Ultra mattress topper combines six zones to support specific body area weight, which promotes a better night's sleep. The largest cells support your lower back and midsection, while the medium-sized cells support the shoulders, lower back and legs. The smallest cells support your head and feet. Combined, these zones provide variable support from head to toe. By using visco-elastic foam, the Memory Foam Ultra mattress topper also molds to your body contours to help prevent tossing and turning during the night. When you lie down on this amazing material, the heat and pressure sensitive foam reacts to your body's weight and temperature, so that it molds to your exact body shape. This means that whether you sleep on your back, stomach or side, your weight is evenly distributed and your spine remains in a neutral position. Other surfaces support your body at the shoulders, hips and legs only. This causes your spine to sag in other areas, which can often result in discomfort, and even back pain. You'll wake up rested, relaxed and ready to take on the day. Anyone who suffers from insomnia and back pain due to mattress discomfort can benefit from this technology.

FREE heavyweight mattress pad included.

Included with the Memory Foam Ultra mattress topper is a fitted mattress pad. It's heavyweight and quilted, and made of 200-count 100% cotton with a 14-inch deep stretchable skirt to fit a mattress



The 2-inch thick temperature-smart foam adjusts to your shape.



up to 21 inches thick.

The size of the mattress pad is determined by the size mattress

topper you order.

Try it for yourself today! The Memory Foam Ultra mattress topper can change the way you sleep. Promote proper spine positioning, while enjoying relief from insomnia and back pain with this full-body support. It comes with a 5-year manufacturer's limited warranty and TechnoScout's exclusive in-home trial. If you are not completely satisfied, simply return it within **60 days** for the full purchase price.

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Item# 2P-2870

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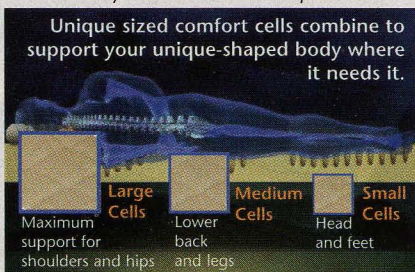
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What could be wrong with your present bed?



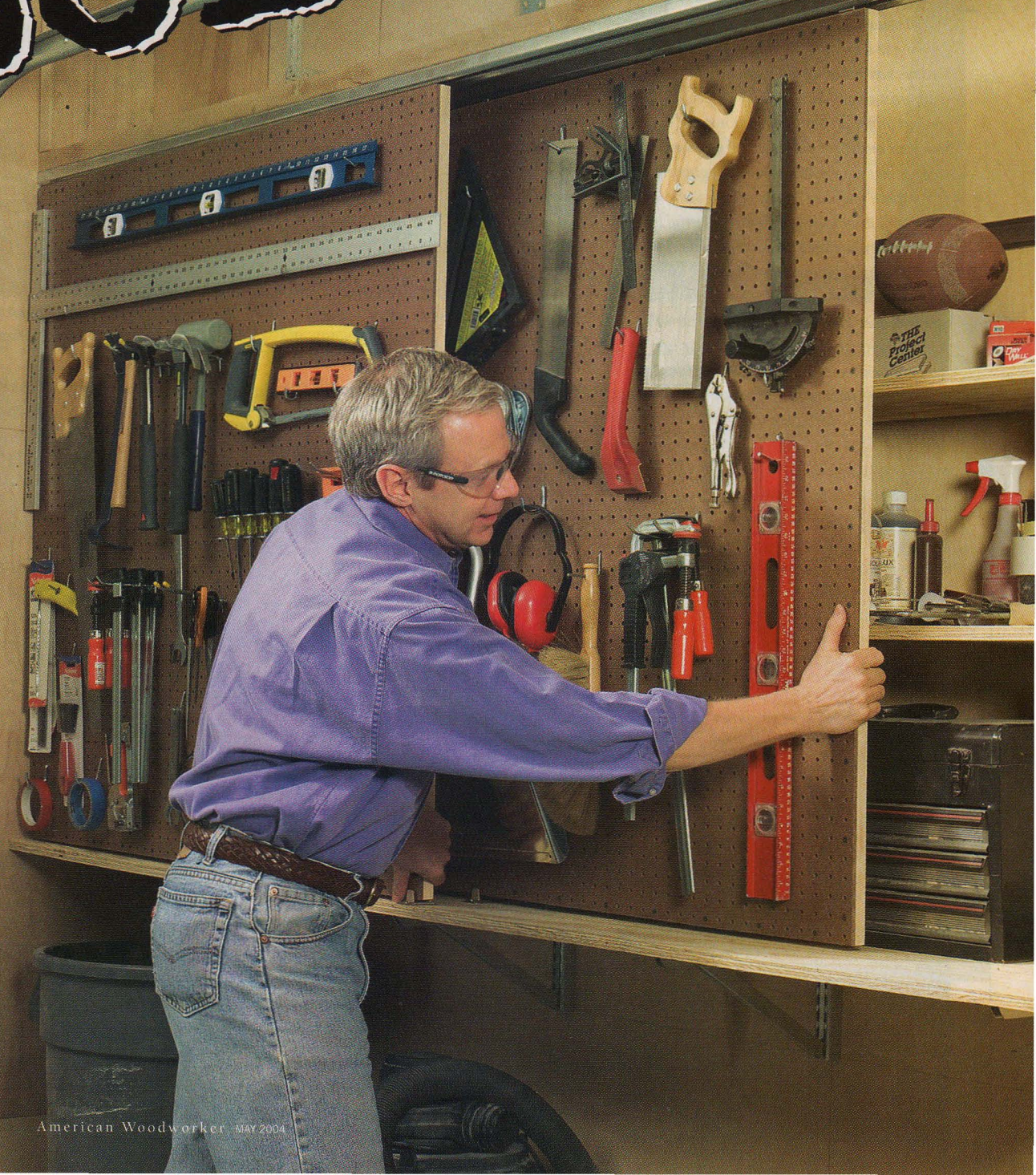
The ideal position is a neutral body posture in which the different parts of the human body are supported individually and evenly. This is the secret behind Memory Foam Ultra, the mattress topper that turns any bed into the ideal sleep surface.



Small Shop

Solution

EDITOR: TIM JOHNSON • ART DIRECTION: DAVID FARR • PHOTOGRAPHY: BILL ZUEHLKE • ILLUSTRATIONS: BRUCE KIEFFER





Great ideas from space-challenged woodworkers just like you



Sliding Wall-O-Tools

I built this 8-ft.-long shelf system to take advantage of the narrow space in the corner of my garage. When the unit is “closed,” I’ve got ready access to the tools hanging on both doors. By sliding one or both doors, I can get to every inch of shelf space behind them. I got everything I needed to build this unit at the home center for about \$175.

The key was to mount the pegboard doors at least 5 in. apart, so I could load the back door with tools and still have it pass behind the front door. I bought two sliding-door hardware kits so each door could slide on its own track. Each kit contains a single length of track designed to hold both doors, two pairs of door hangers and a tracking guide designed to keep both doors in line at the floor.

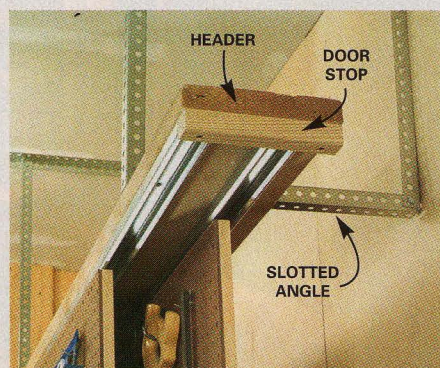
How I Built It

I installed the shelves first, leaving enough room underneath to store my lawn mower and other garage essentials (photo at left). All three shelves came from a single sheet of plywood. The upper shelves are 11 in. wide and the bottom one is 20 in. I used 11-in. double-mount brackets for the upper shelves and 14-in. double-mount brackets with support arms for the wide bottom shelf.

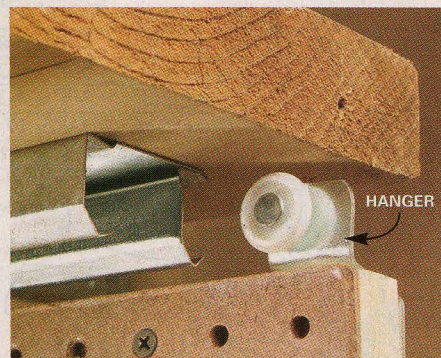
I mounted the sliding-door tracks on a 2x10 header that I anchored directly above the wide shelf with lengths of slotted angle extending from both the ceiling and wall (upper right photo).

To make the sliding doors, I cut a single sheet of pegboard in half and framed both pieces with 1x2 stock (each door has four vertical stiles for rigidity). I suspended each door from four hangers (center right photo) and fastened the tracking guides, one per door, on the wide plywood shelf (lower right photo). After installing the doors, I blocked the open end of the tracks with a stop.

Sue Brunclik



The doors hang from widely spaced tracks mounted on a 2x10 header. Lengths of slotted angle hold the header securely in place.



The doors glide smoothly on roller-equipped hangers. Each track has two grooves, so you can easily change the spacing between the doors and shelves, if necessary.



Each door has its own tracking guide. My system uses two sliding-door hardware kits. Each kit contains one guide designed for two doors. I customized them with a hacksaw.



Pantry Door Tool Cabinet

Inspired by the pantry cabinet in the kitchen of our new house, I built this compact version for my workshop. It has the same deep double-hinged doors that make everything inside easy to reach. I used 3/4-in.-thick stock so I could use screws to hang tools inside. The thick back made it easy to fasten the cabinet to the wall.

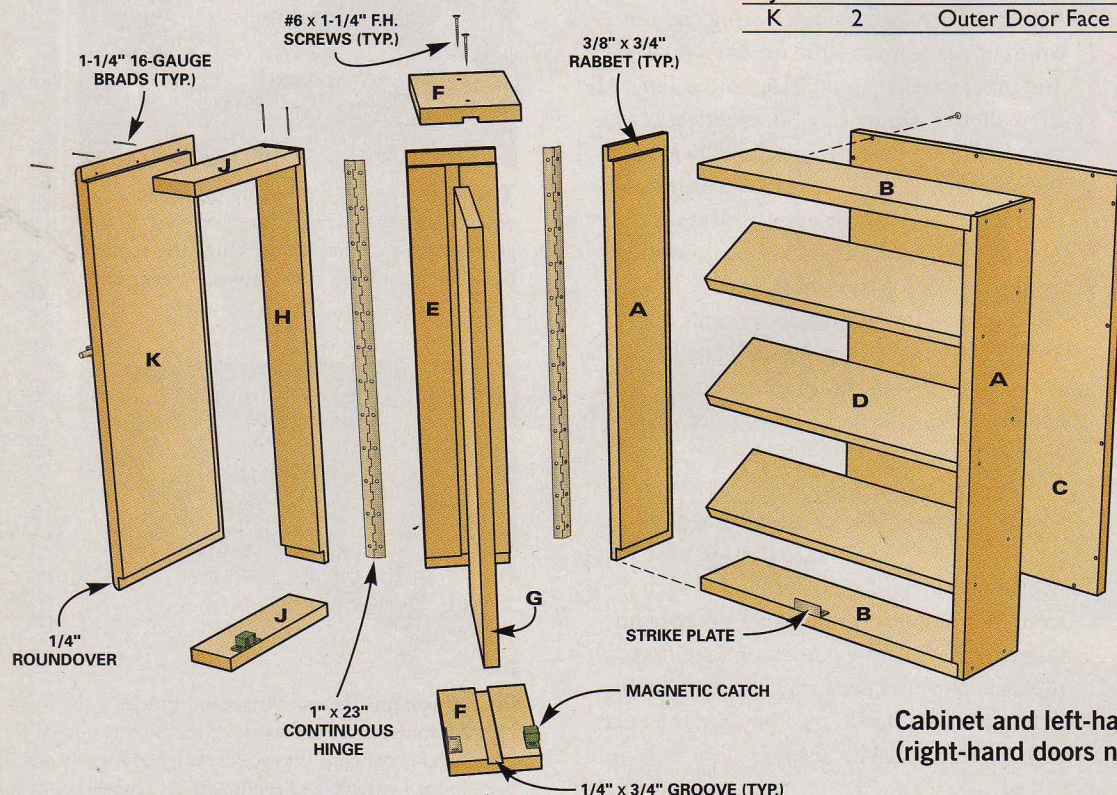
I used less than a sheet of 3/4-in.-thick plywood and two 4-ft.-long continuous hinges to build my cabinet. I got everything I needed at the local home center. Including the latch and magnetic catches, my total cost was \$75.

Ernest Blair

Overall Dimensions: 12-5/8" x 18" x 24"

Part Number	Name	Dimensions
A 2	Cabinet Side	3/4" x 4-3/4" x 24"
B 2	Cabinet End	3/4" x 4-3/4" x 17-1/4"
C 1	Cabinet Back	3/4" x 17-1/4" x 23-1/4"
D 3	Shelf	3/4" x 4-1/2" x 16-1/2"

Part Number	Name	Dimensions
E 2	Inner Door Side	3/4" x 4-3/4" x 24"
F 4	Inner Door End	3/4" x 4-3/4" x 8-5/8"
G 2	Inner Door Divider	3/4" x 8-1/2" x 23-1/2"
H 2	Outer Door Side	3/4" x 2-3/4" x 24"
J 4	Outer Door End	3/4" x 2-3/4" x 8-5/8"
K 2	Outer Door Face	3/4" x 9" x 24"

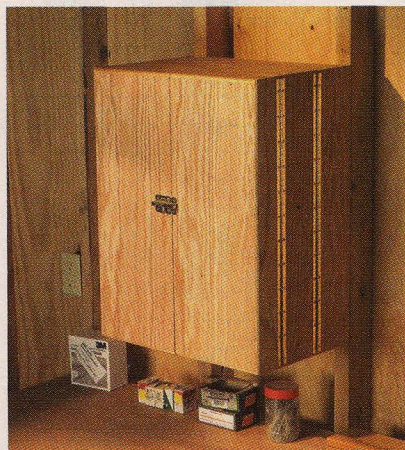


See "Giant Shop Cabinet" (AW #91, December 2001) for a colossal floor-standing version of this cabinet!

**Cabinet and left-hand doors
(right-hand doors not shown)**

Build It

1. Cut the cabinet frame pieces to size. Rabbet the sides (A) for the ends (B) and the back (C). Rabbet the ends for the back, too.
2. Glue the cabinet frame and back simultaneously. Make sure the assembly is square before you drive the nails and screws.
3. Install the shelves (D). Drill holes for router bits and other accessories before installation. Bevel the shelves' back edges to match the slope that works best for you. Screw the shelves from the back and nail them from the side.
4. Cut the door frame pieces. Rabbet the door sides (E and H) for the ends (F and J).
5. Cut or rout grooves in the inner door frame pieces (E and F) for the dividers (G).
6. Assemble the inner doors. Make sure they're square.
7. Round over the edges and rout rabbets around the outer door faces (K).
8. Assemble the outer doors. Make sure they're square.
9. Cut the hinges to length with a hacksaw.
10. Lay the cabinet on its back to install the doors. Clamp the inner doors in position on top of the cabinet. Then attach the hinges.
11. Clamp the outer doors on the inner doors and attach the remaining hinges.
12. After hanging the doors, install magnetic catches and mount the latch.



Instant Surface

In my compact shop, everything has to be portable and stowable, including my work surfaces. Whenever I need tabletop space for processing parts, milling boards or even assembling a project, I whip out this little gem. It's easy to maneuver because it folds flat for storage and weighs less than 25 lbs. It sets up in seconds and is surprisingly rigid.

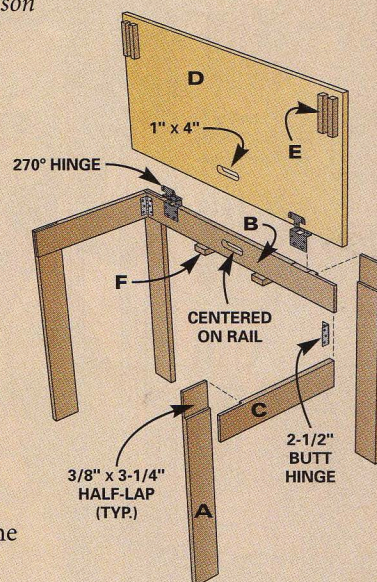
I used half-lap joints on the base and heavy-duty 270-degree hinges on the top (see Sources, below). When the table is folded, cleats extending from the back rail hold the hinged legs, and hand holes in the top and back rail align to form a comfortable grip. When the table is set up, the swing-leg assemblies butt against the back rail and are firmly captured by cleats attached to the bottom of the top.

Tim Johnson



Build It

1. Cut the legs (A) and rails (B and C) to size.
2. Cut the hand hole and mortises for the 270-degree hinges in the back rail.
3. Cut half-lap joints in the legs and rails.
4. Lay the back assembly on your bench and clamp the swing-leg assemblies on top of it in the open position. Make sure the top edges and outside faces of the swing-leg rails (C) are flush with the top and outside edges of the back rail (B).
5. Screw on the butt hinges.
6. Install the 270-degree hinges and fasten the top (D).
7. Transfer the location of the hand hole from the back rail to the top and cut it out.
8. Turn the table upside down, swing the legs wide open (so they bear against the back rail) and fasten the cleats (E and F).



Overall Dimensions: 18-1/4" x 28-3/4" x 39" (set up),
3-5/16" x 29" x 39" (folded)

Part	Number	Name	Dimensions
A	4	Leg	3/4" x 3-1/4" x 28"
B	1	Back Rail	3/4" x 3-1/4" x 36"
C	2	Side Rail	3/4" x 3-1/4" x 17-1/4"
D	1	Top	3/4" x 18" x 39"
E	4	Top Cleat	3/4" x 3/4" x 4-1/2"
F	2	Leg Cleat	3/4" x 1-1/2" x 2"

Source

Woodworker's Hardware, (800) 383-0130, www.wwhardware.com
C374 Full overlay 270-degree hinge, \$4 each (2 required).



Expandable Parts Rack

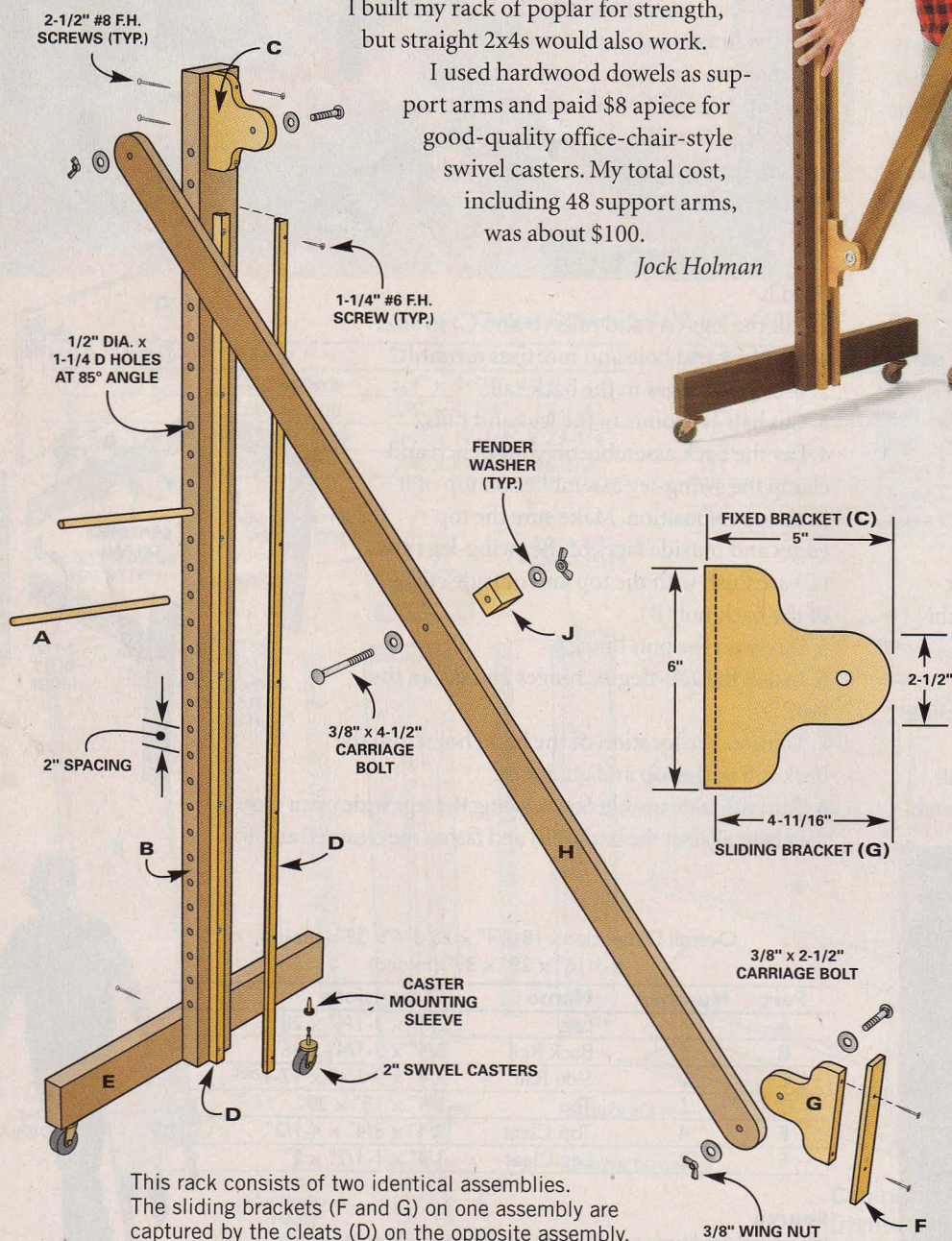
When I worked on a big project, every surface in my shop used to get covered with stacks of parts. While visiting a small production shop, I saw an expanding metal rack in the finish room, loaded with kitchen cabinet doors.

A light bulb went on in my head and this wooden version now graces my shop. It's just over 1 ft. wide when closed and expands to just under 7 ft. Wing nuts make it easy to lock in any position. I've used my rack to hold everything from 12-in.-long shelves to 12-ft.-long baseboard moldings.

I built my rack of poplar for strength, but straight 2x4s would also work.

I used hardwood dowels as support arms and paid \$8 apiece for good-quality office-chair-style swivel casters. My total cost, including 48 support arms, was about \$100.

Jock Holman



This rack consists of two identical assemblies. The sliding brackets (F and G) on one assembly are captured by the cleats (D) on the opposite assembly.

3/8" x 3/8" RABBET (TYP.)

Build It

1. Cut all parts to size and drill the bolt holes.
2. Drill angled holes for the dowel support arms (A) in both edges of the uprights (B).
3. Attach fixed brackets (C) to the top of each upright.
4. Rout rabbets in the cleats (D) and attach them.
5. Glue and screw the legs (E) to the uprights after drilling holes and installing the caster sleeves.
6. Attach the foot (F) to the bottom of each sliding bracket (G) and then bolt these brackets to the scissor arm (H). The bolt head goes against the bracket, the wing nut against the arm.
7. Install the sliding brackets between the cleats on the uprights and position them at the bottom. Rotate the scissor arms upward.
8. With help from a friend, stand the uprights opposite one another and bolt the scissor arms to the fixed brackets on the opposing uprights (again, bolt heads against the bracket).
9. Install the spacer (J) and bolt the scissor arms together.
10. Install the swivel casters and fasten a mailing tube to store the support arms.



Overall Dimensions:*

Closed: 14-1/2" x 28" x 74-1/2"

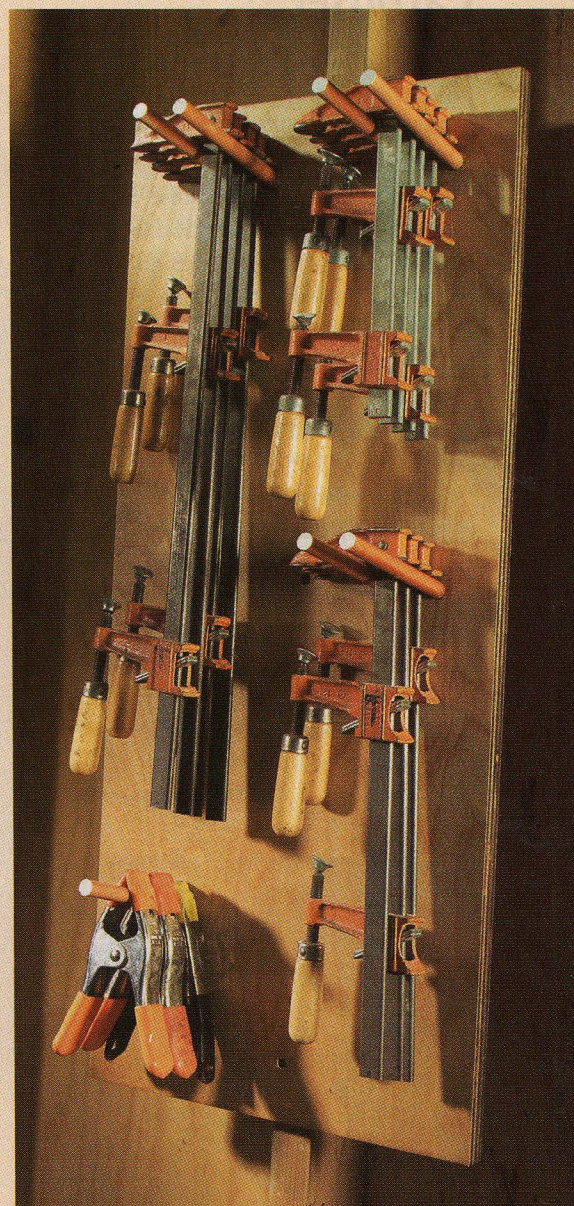
Open: 81-3/4" x 28" x 74-1/2"

Part	Number	Name	Dimension
A	Numerous	Support Arm	1/2"-dia. x 13-1/2"
B	2	Upright	1-1/2" x 3-1/2" x 72"
C	2	Fixed Bracket	3/4" x 5" x 6"
D	4	Cleat	3/4" x 3/4" x 63" **
E	2	Leg	1-1/2" x 3-1/2" x 28"
F	2	Foot	5/16" x 1-3/8" x 9"
G	2	Sliding Bracket	3/4" x 4-1/16" x 6"
H	2	Scissor Arm	3/4" x 2-1/2" x 68"
J	1	Spacer	1-1/2" x 1-1/2" x 2"-long

* including 4"-dia. mailing tube

** 3/8" x 3/8" rabbet on inner edge

Clamp Camp



I've got a lot of clamps, but they don't take up much space. I simply drilled 5/8-in.-dia. holes through 3/4-in. plywood at a slight upward angle and glued in 9-in.-long 5/8-in.-dia. dowels. Each pair of dowels holds six clamps, so I can hang 18 adjustable clamps and four spring clamps in only 2 sq.-ft. of wall space.

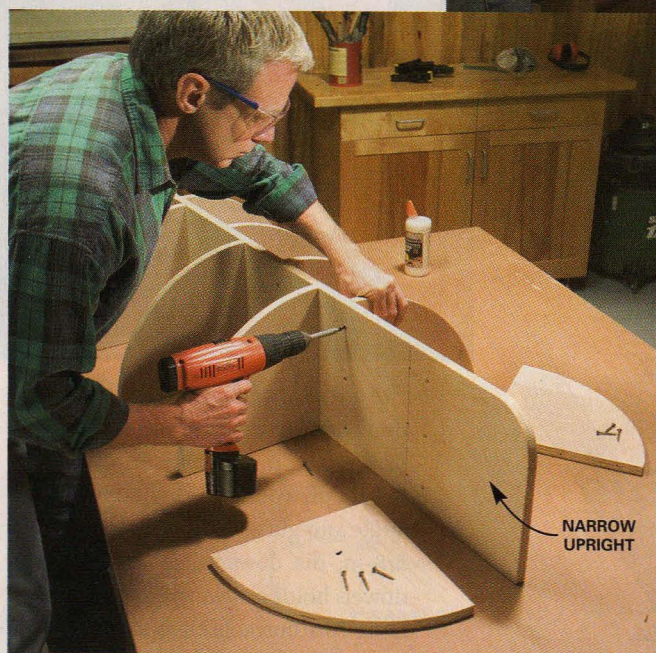
Tim Johnson

Small Parts Carousel

While visiting an antique shop, I discovered a way to store all that indispensable small stuff that used to clutter my workshop. On display was a rotating bolt cabinet from an old-fashioned hardware store. When I got home, I designed this carousel that rotates on inverted swivel casters. It's easy to build, because there's no complicated joinery. All the parts are cut to size and assembled with glue and screws.

My design requires 1-1/2 sheets of plywood, a quarter sheet of 1/8-in. hardboard, six swiveling casters, a 1-1/4-in.-dia. hardwood dowel and a 3-ft.-long 2x4. I used Tapcon cement anchors to bolt this baby to the floor.

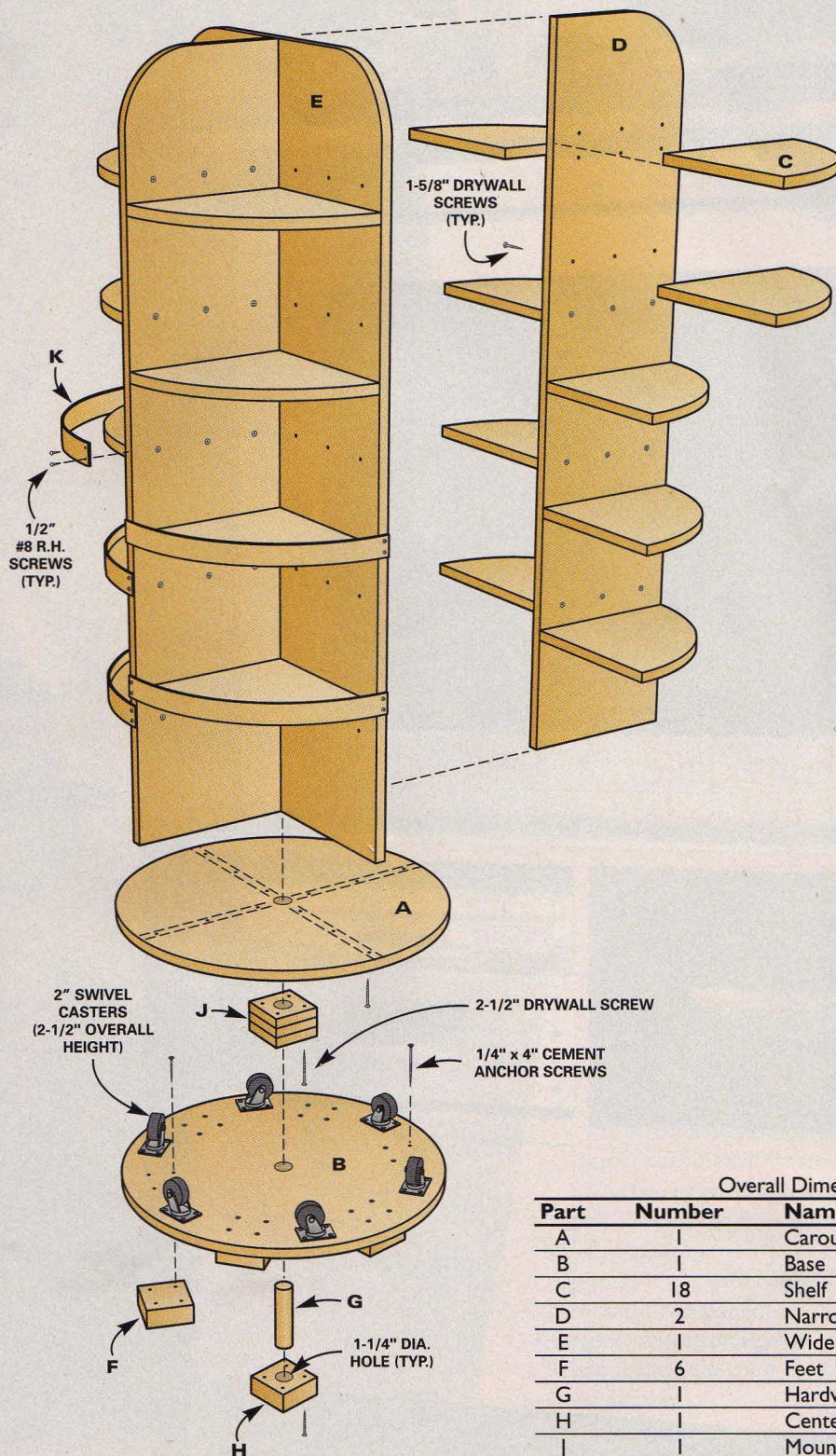
Jeff Timm



Assembly is easy, because everything is screwed and glued. Stagger the shelves and fasten them to the two narrow uprights. Then fasten these assemblies to the wide upright.



The carousel rides on casters and rotates on a large wooden pin.



Build It

1. Cut and smooth the round carousel bottom (A) and base (B).
2. Drill 1-1/4-in.-dia. holes through the centers of both pieces.
3. Cut out the shelves (C). Use the round carousel bottom as a template for the curved edges.
4. Mark the locations of the shelves on the two narrow uprights (D) and fasten them. Space the shelves to suit your needs, but be sure to stagger them, so they're easy to fasten (photo at far left).
5. Attach the two shelf/upright assemblies to the wide upright (E). Note: These assemblies must not be mirror images!
6. Fasten the carousel bottom to the completed shelf assembly.
7. Fasten the casters to the base (photo at lower left).
8. Attach the six feet (F). If your bin is going on an unfinished cement floor, use pressure-treated 2x4 stock for the feet.
9. Attach the center foot (H) to the base and glue in the dowel (G).
10. Position the base and level it with shims.
11. Anchor the base to the floor.
12. Drill a 1-1/4-in. hole in the glued-up mounting block (J) and fasten it to the carousel bottom.
13. Mount the carousel on the base.
14. Glue and screw the shelf edges (K). Cut them to length after installation. **AW**

Overall Dimensions: 24"-dia. x 59-1/2" H

Part	Number	Name	Dimensions
A	1	Carousel Bottom	3/4" x 23-3/4"-dia.
B	1	Base	3/4" x 23-3/4"-dia.
C	18	Shelf	3/4" x 11-1/2" x 11-1/2" *
D	2	Narrow Upright	3/4" x 11-1/2" x 54"
E	1	Wide Upright	3/4" x 23-3/4" x 54"
F	6	Feet	1-1/2" x 3-1/2" x 4"
G	1	Hardwood Dowel	1-1/4"-dia. x 5"
H	1	Center Foot	1-1/2" x 3-1/2" x 4"
J	1	Mounting Block **	2-1/8" x 3-1/2" x 3-1/2"
K	22	Hardboard Shelf Edge	1/8" x 1-1/2" x 21" ***

* shape outer edge to match round base

** glued-up plywood

*** cut to fit after installation





High-Style, Low-Cost TV Cabinet

Simple joinery makes it fast –
plywood makes it inexpensive

The striking style of this cabinet was inspired by visits to upscale furniture stores where we found similar pieces selling for \$1,500 or more. But we designed this unit so you can build and finish it in about three weekends for a cost of less than \$300! That will leave you more money for what you put *inside* the cabinet.

Design Features

- The TV space is 39 in. wide by 30-1/2 in. tall by 23-3/4 in. deep, and will accommodate most 36-in. TVs, but measure your TV before building this cabinet.
- The two large component openings will accommodate stacks of high-tech TV gear. Each one measures 19-1/8 in. wide by 11-1/4 in. tall by 23-3/4 in. deep.
- Cutouts in the back of the TV shelf make it easy to run wires between the TV and the components.
- Two deep drawers provide lots of room for videotapes, DVDs or video-game junk.
- To create the bold color contrast, we stained the stiles and top with a dye before assembly.

Tools and Materials

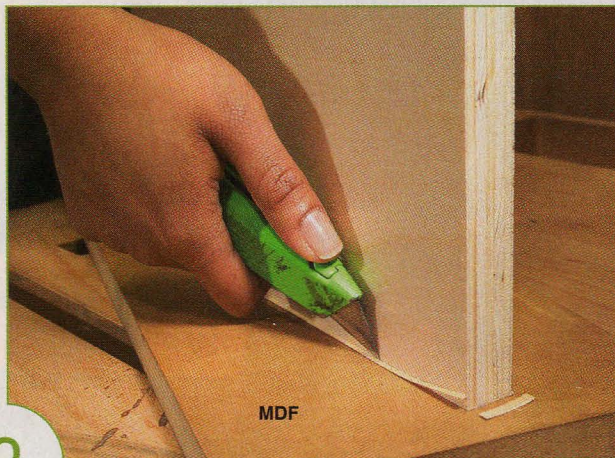
This project requires a jigsaw, tablesaw and router. You'll also need a dado set for your tablesaw, a pattern bit for your router and clamps with a reach of at least 25 in.

It takes only three sheets of 3/4-in.-thick plywood, one sheet of 1/4-in.-thick plywood and about 6 bd. ft. of lumber. Shop for plywood sheets that are similar in color

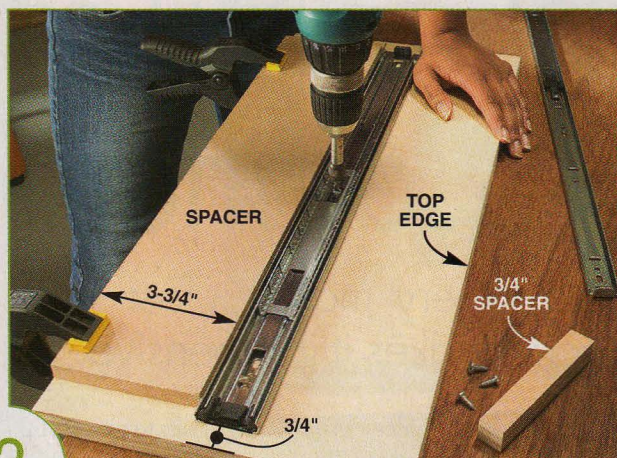
By Gary Wentz



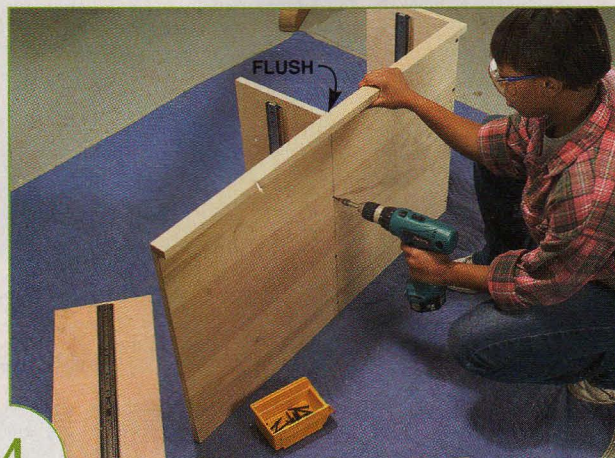
- 1** **Iron on edge banding** to cover the exposed edges of the uprights, shelves, top and drawers. A cheap or old iron works for this.



- 2** **To trim the banding**, set it on a flat surface and use a sharp utility knife. MDF or hardboard makes the best trimming surface because it has no grain. Wood grain can steer your knife off course.



- 3** **Screw the drawer slides** onto the sides and center divider of the drawer section. It's easier to do it now while the parts are lying flat. A spacer makes centering the slides foolproof. Set the slides $\frac{3}{4}$ in. back to allow for the inset drawer faces.



- 4** **Assemble the drawer and component storage separately.** Drill a pilot hole for each screw and make sure the front edges of the parts are flush.

and grain on at least one side and be sure to face these sides out when you build your cabinet. The sheet of $\frac{1}{4}$ -in. plywood for the back is less critical since it will be almost totally hidden once you install your TV and components.

We bought the birch plywood for this cabinet at a home center, but we had to sort through half the pile to find three sheets that were similar. Two of the sheets had curly grain, which was a lucky find. We used them for the sides of the cabinet. It's easier to find matching plywood at a lumberyard. It will probably cost you more, but it may also save you some time and hassle.

We bought the birch lumber from a lumberyard because our home center didn't carry it.

Prepare the Plywood Parts

1. Cut out plywood parts A through G according to the Cutting List, page 55, and the Plywood Cutting Diagram, Fig. D, page 55. Rough cut your sheets of plywood into manageable sizes with a jigsaw or circular saw, and then do the final cutting on your tablesaw. Use a router and straightedge on parts that are too big for your tablesaw.

2. Edge band the plywood edges that will be visible when the project is complete (see Notes column in Cut-

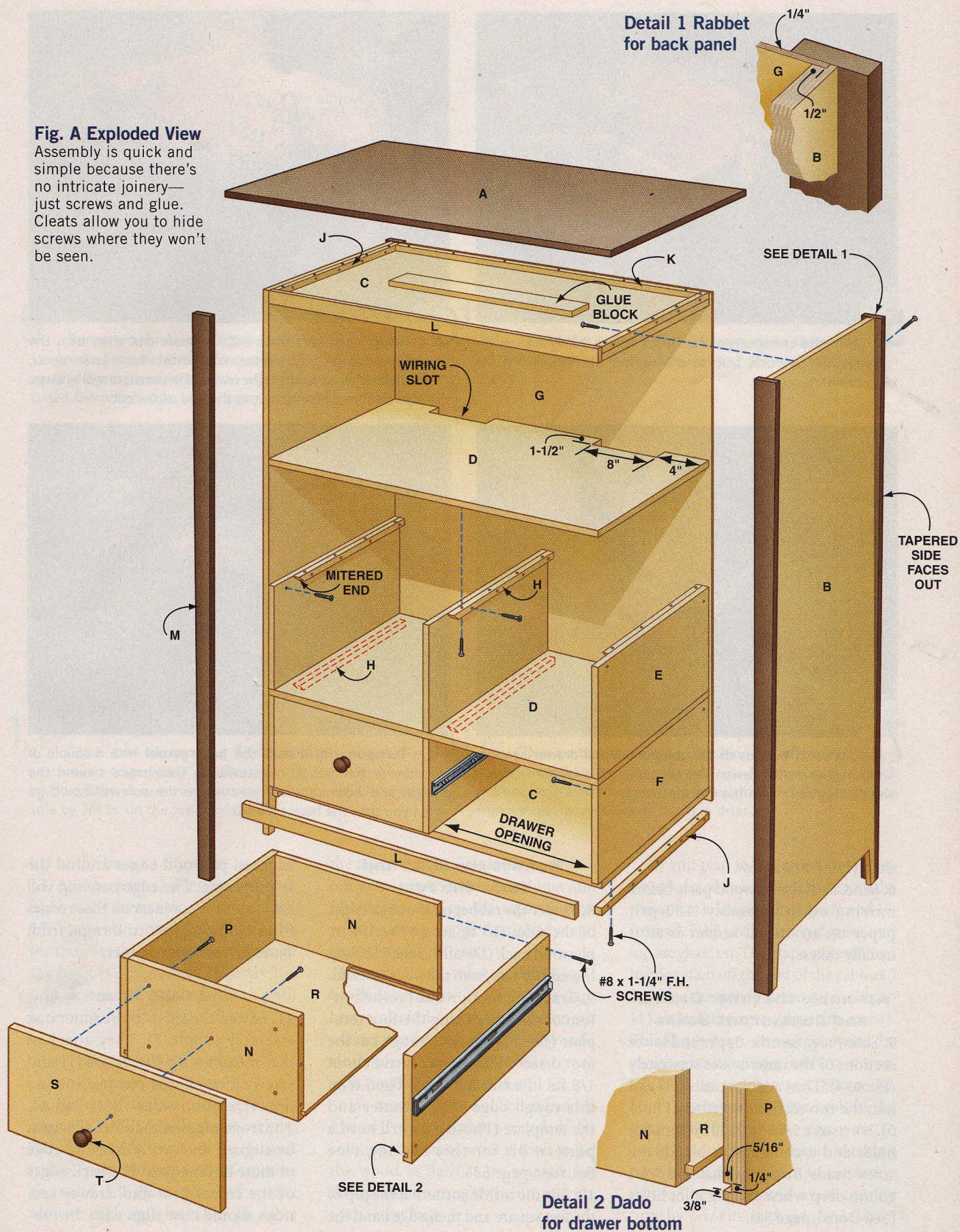
ting List, page 55). Pre-glued edge banding (see Sources, page 55) is simple to apply with an old iron and easily trimmed with a utility knife (Photos 1 and 2). Rubbing the banding with a wood block helps it adhere to the plywood edge.

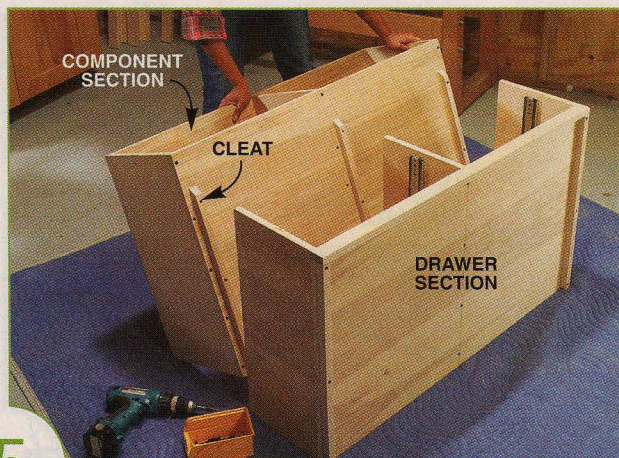
3. Screw the cabinet half of the drawer slides to the drawer divider and sides (F). It's easier to attach the slides now with the parts flat and before the cabinet is all assembled (Photo 3). We used ball-bearing slides with a weight rating of 100 pounds (see Sources, page 55).

4. Glue and clamp the rails (L) to the front edge of the bottom and sub top (C).
5. Cut out the wiring slots in the TV

Fig. A Exploded View

Assembly is quick and simple because there's no intricate joinery—just screws and glue. Cleats allow you to hide screws where they won't be seen.

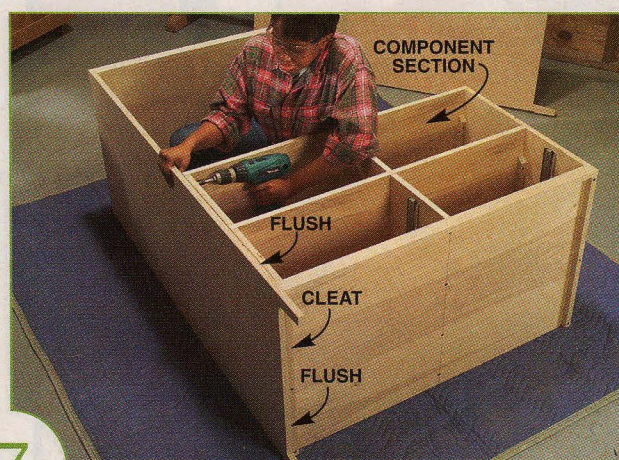




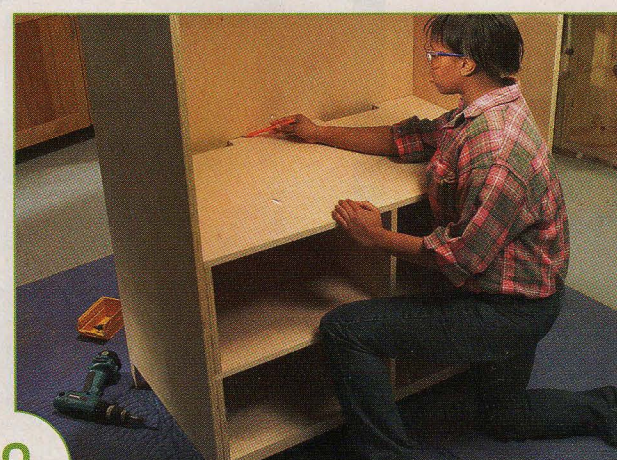
- 5** Join the component section, which is simply a screwed-together plywood box, to the drawer section. The cleats keep the parts aligned.



- 6** Rough cut the feet with a jigsaw and then trim the rough edge using a template and a pattern bit in your router. A small block glued to the right end of the template will prevent the plywood from tearing out at the end of the cut.



- 7** Screw the sides to the component and drawer sections from the inside. Fasten the cleat along the bottom edge. It should align flush with the foot opening.



- 8** Temporarily install the back panel with a couple of screws, but put it in backwards. Then trace around the shelves and sides to show you where the screws should go when you turn the back around.

shelf (D) with a jigsaw.

6. Sand all of the plywood parts before moving on to assembly; 180-grit paper on an orbital sander is all it usually takes.

Assemble the Inner Drawer and Component Boxes

7. Screw together the upper and lower sections of the inner boxes separately (Photo 4). Then add the cleats (H) and join the two sections together (Photo 5). We used a 5/32-in. drill bit for pilot holes and a countersink bit for the screw heads. Be careful that you don't go too deep when drilling pilot holes (See Oops!, page 54).

Rabbit the Sides and Rout the Feet

8. Router the rabbet on the back edges of the sides (B) to accept the 1/4-in. plywood back (Detail 1, page 51). Stop the rabbet 4 in. from the sides' bottom.

9. Trace the foot profile on the bottom of the sides using the foot template (Fig. B, page 55). Rough cut the foot detail with a jigsaw. Leave about 1/8 in. of extra material. Then trim this rough edge with a router and the template (Photo 6). You'll need a pattern bit for this routing (see Sources, page 55).

10. File the inside corners at the top of the feet square and then edge band the

exposed plywood edges around the foot opening. The edge banding will help protect the veneer on these edges from chipping due to bumps from shoes or a vacuum cleaner.

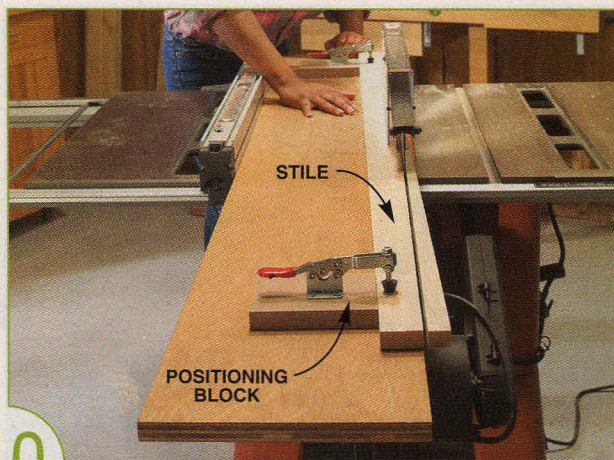
Add the Sides

11. Fasten the sides to the inner box assembly (Photo 7). They attach at the bottom with the cleats (J) and screws through the component and drawer section sides (E, F, Fig. A). The front edges of the sides (B) must be aligned flush with the front edge of these inner boxes. The back edges of the component and drawer sections should now align with the rabbet.



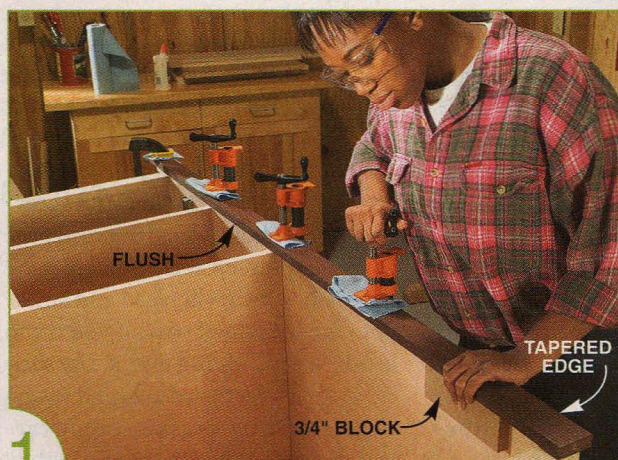
9

Screw on the back. Begin by fastening one edge with a few screws. Then nudge the unit one way or the other until you get equal diagonal measurements, which means it's square. Then fasten the other edge, top, bottom and shelves with screws.



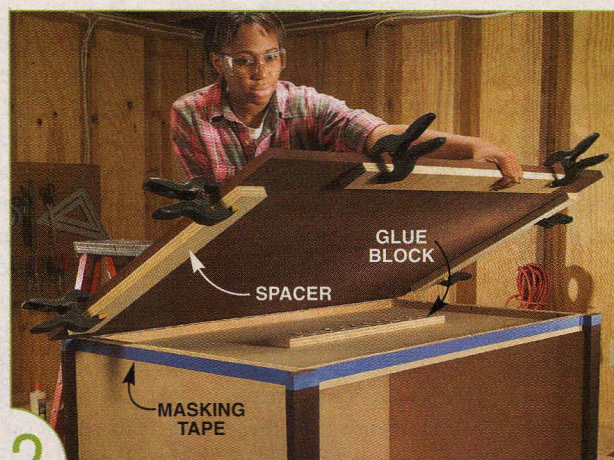
10

Taper the stiles that will be applied to the sides of the cabinet with a shop-made tapering jig. After sanding, stain the stiles.



11

Glue and clamp the front stiles in place with the tapered edge facing out. Position the stiles flush with the inside of the drawer and components cabinet. Overhang the stile by 3/4 in. on the inside of the TV space.



12

Glue on the top. Spacers position it exactly and masking tape catches any glue squeeze-out. A plywood glue block provides extra bonding area. Stack weights on the top and then remove the spacers before the glue dries.

bet at the back of the sides.

12. Attach cleats (J, K) to the sub top. Then screw the sub top (C) to the sides.

13. Stand the unit up and mark the location for the screws that will attach the back (G, Photo 8). Then lay the unit down and attach the back with screws every 6 in. (Photo 9).

Attach the Stiles and the Top

14. Build the stile-tapering jig (Fig. C, page 55). You'll spend an hour making the jig, but it's worth it, because it makes quick and easy work of tapering the stiles (M, Photo 10). Before you remove each stile from the jig, label

the tapered edge. This taper must face out when attached to the cabinet and it's easy to mix up the tapered edge with the straight edge. Completely sand the stiles at this time.

15. Next stain the stiles, the top (A) and the drawer knobs (T). We used a dark brown alcohol-based dye stain for our cabinet (see Sources, page 55). Dye stain is easy to work with and it won't interfere with the gluing in Steps 16 and 17.

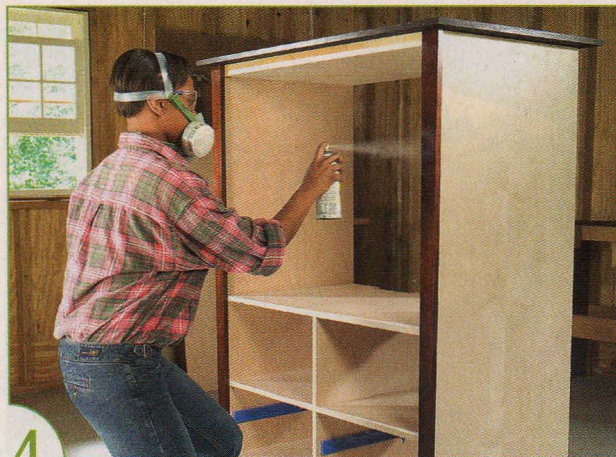
We used 12 oz. of alcohol and added 1 oz. of dye. This makes a very dark dye solution, but that's what it took to get the wood as dark as we wanted. Let the dye dry thoroughly before moving to the next step.

(If you plan to use an oil stain, skip step 15. An oil stain will interfere with the gluing that takes place in Steps 16 and 17. Instead, wait until the front stiles and top are glued on. Then tape around them to keep stain off the rest of the cabinet.) 16. Glue the front stiles in place (Photo 11). Attach the rear stiles with screws. This allows you to remove them and the plywood back for easier finishing later on. 17. Glue the top in place (Photo 12). Don't use too much glue around the perimeter of the case; you want to avoid a squeeze-out mess. Masking tape is still a good idea to catch any drips. The top should overhang the front by 2-1/4 in., each side by 2-7/8 in.



13

Position inset drawer faces using spacers and drive a temporary screw through the center of the front, where the knob will be attached later. Then pull out the drawer and add screws from the inside.



14

Spray on a light coat of clear shellac. This seal coat keeps the dark dye stain from bleeding onto unstained wood areas and makes a good sealer for the polyurethane topcoat.

and the rear stiles by 3/4 in. We used spacers to help us center the top on the case. Once the top is aligned, weight it down and then immediately remove the spacers, or any squeezed-out glue might bond them to the top. Leave the weight on the top until the glue is dry.

Build and Install the Drawers

18. Cut out drawer parts N through R. Make the length of the drawer fronts and backs (N) so that when the drawers are assembled, they are 1 to 1-1/16 in. narrower than the width of the drawer opening (Fig. A). This is the space required for most ball-bearing-type slides.

19. Cut dados in drawer parts N and

P (Detail 2, page 51) and then edge band the top edges of these parts. Sand these drawer box parts at this time.

20. Install the drawer bottoms (R) in the dados and assemble the drawer sides with glue and screws. Strips of masking tape along the joints will protect the sanded parts from glue squeeze-out. Wipe any glue squeeze-out off the tape, but leave the tape on until the glue in the joint has set up.

21. Center the drawer half of the drawer slides on the outsides of the drawers and attach them with screws. Put the drawer boxes into the cabinet.

22. Cut the drawer faces (S) 1/4 in. smaller than the drawer opening and edge band all four edges. This will produce a clearance space around the sides

of the drawer faces that is slightly less than 1/8 in. Attach the drawer faces to the drawer boxes with screws (Photo 13).

Add the Finishing Touches

23. Seal the whole cabinet with spray-on shellac (Photo 14 and Sources, page 55). The spray-on shellac will seal the dye stain, which will bleed and smear onto the unstained parts if you try to brush or wipe a finish over it. Use shellac in a well-ventilated area and wear a respirator with organic vapor cartridges (see Sources, page 55). Lightly sand the shellac after it is completely dry and then topcoat the cabinet with a brush-on satin polyurethane varnish. Shellac makes a good seal coat but polyurethane is a lot more durable.

Oops!

Drilling a pilot hole is no time for guessing, especially when there's a risk of drilling too deep and going through the other side. To avoid this, mark the correct depth on the bit with a masking tape flag. When the flag gets close to the wood, slow down until it touches, and then stop drilling.

I got lucky on this drill-through. The bit pushed out the veneer, but it didn't break off. I was able to work some glue behind the veneer with a tiny nail and stick it back in place. After the first coat of clear finish, I added a speck of matching wood filler for a near-perfect repair. **AW**

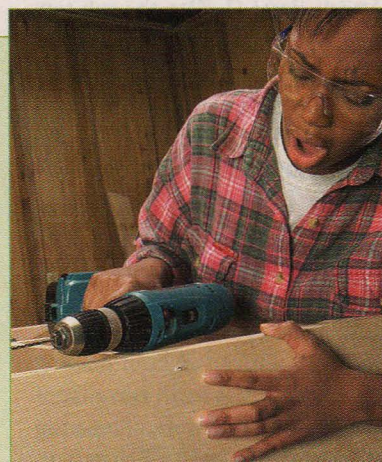


Fig. B Routing Template for Foot Profile

Carefully cut the template with a jigsaw, then sand the cut edges straight and smooth before using. The positioning block centers the template on the side panel.

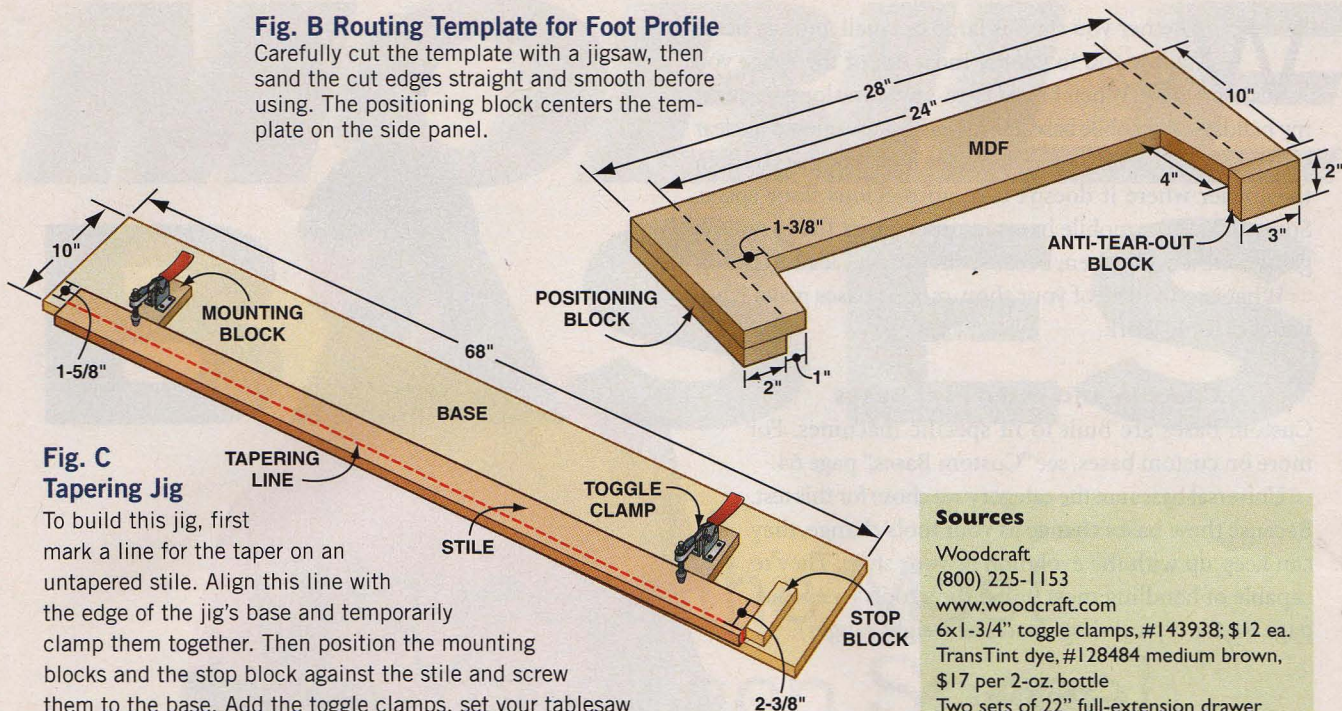
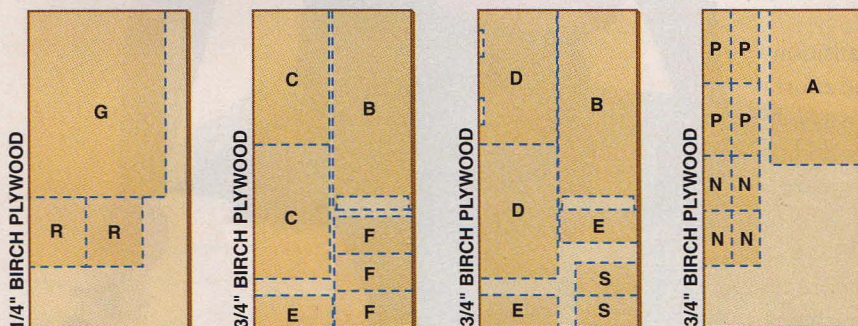


Fig. C Tapering Jig

To build this jig, first mark a line for the taper on an untapered stile. Align this line with the edge of the jig's base and temporarily clamp them together. Then position the mounting blocks and the stop block against the stile and screw them to the base. Add the toggle clamps, set your tablesaw fence at 10 in. and you're ready to rip.

Fig. D Plywood Cutting Diagram



Sources

Woodcraft
(800) 225-1153
www.woodcraft.com
6x1-3/4" toggle clamps, #143938; \$12 ea.
TransTint dye, #128484 medium brown,
\$17 per 2-oz. bottle
Two sets of 22" full-extension drawer
slides, #131200, \$15/set
7/8" white birch edge band, #123273,
\$15 per 50 ft. roll
1/2" x 1" top-bearing pattern bit,
#129640, \$18
1-1/4"-dia. wood knobs, #130270, \$2/pr.
Zinsser
(732) 469-8100
bullseye@zinsser.com
Bulls Eye clear spray shellac, 12 oz.
aerosol can, \$5 at paint stores and home
centers, or contact Zinsser for a distribu-
tor near you.
Organic respirator, \$30 each at home
centers and paint stores.

CUTTING LIST

Overall dimensions: 46-3/4" W x 27-3/4" D x 61" T

Part	Item	Qty	Final Dimensions			Notes
			T	W	L	
Birch Plywood	A Top	1	3/4"	27-3/4"	46-3/4"	Edge band all four edges.
	B Sides	2	3/4"	24"	60-1/4"	
	C Bottom and sub top	2	3/4"	23"	40-1/2"	
	D TV/component shelves	2	3/4"	23-3/4"	40-1/2"	Edge band front edges.
	E Component sides/divider	3	3/4"	23-3/4"	11-1/4"	Edge band front edge of center divider only.
	F Drawer sides/divider	3	3/4"	23-3/4"	10"	Edge band front edge of center divider only.
	G Back	1	1/4"	41-1/2"	55-1/2"	Drill holes for power cords after assembled.
Birch Lumber	H Cleats for inner box	6	3/4"	3/4"	20"	Miter front ends to make less visible when installed.
	J Bottom/sub top cleats	4	3/4"	3/4"	23"	
	K Long top cleat	1	3/4"	3/4"	38-1/2"	
	L Rails	2	3/4"	1-1/2"	40-1/2"	
Birch Plywood	M Stiles	4	3/4"	2-1/2" *	60-1/4"	Tapered width is 2-3/8" at top and 1-5/8" at bottom.
	N Drawer fronts/back	4	3/4"	8-1/2" *	16-5/8" *	Measure drawer opening to determine exact length.
	P Drawer sides	4	3/4"	8-1/2"	22"	
	R Drawer bottoms	2	1/4"	17-1/8" *	21"	Check width before gluing drawers together.
	S Drawer faces	2	3/4"	18-7/8" *	9-3/4" *	
	T Wood knobs	2	1-1/4" dia.			See Sources, above.

*Approximate

Whether your shop is large or small, mobile bases allow you to get the most out of the space you have. When I need to re-saw some long stock on my bandsaw, its mobile base lets me easily reposition it to clear nearby obstacles. When I'm done, the bandsaw goes back in the corner where it doesn't take up precious floor space. Some folks have mobile bases in order to get the car in the garage. Others like them because they make cleanup easier.

Whatever the size of your shop, mobile bases make it a better place to work.

Custom and Universal Bases

Custom bases are built to fit specific machines. For more on custom bases, see "Custom Bases," page 64.

Universal bases are the category we chose for this test. Because these bases change as your tools change, they can keep up with the evolution of your shop. They're capable of handling most home shop tools (see table, page 64, for typical shop-machine weight ranges).

The Test

We loaded each base to 400 lbs. since most stationary tools fall under this weight limit. The Delta was loaded to its 300-lb. limit. Bases capable of carrying more were re-tested at their weight limits.

We looked at each base for ease of transition from rolling cart to stationary platform and effort needed to level them on an uneven floor. We noted how stable each platform was in the down position as well as how maneuverable it was in tight spaces.

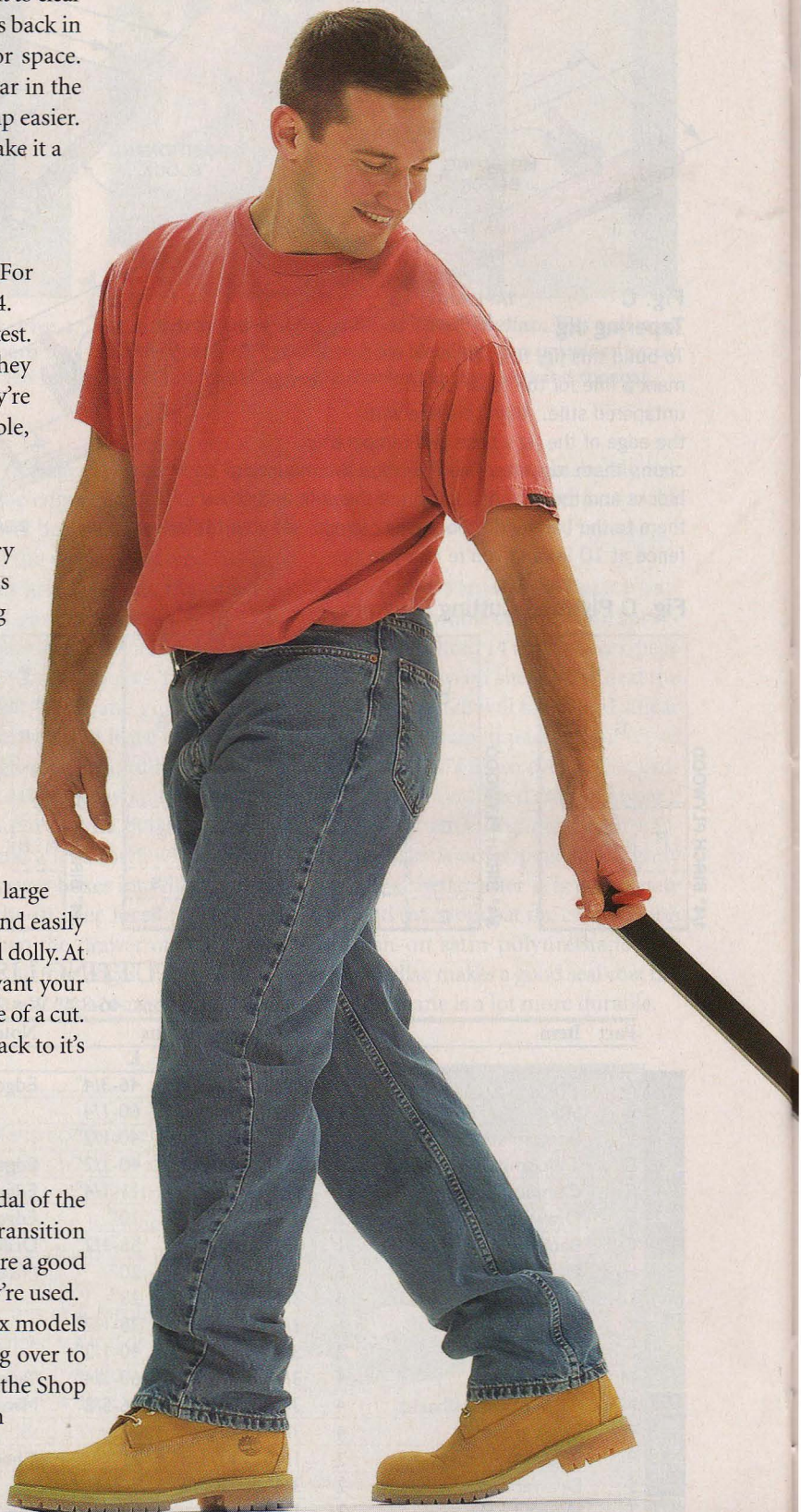
What To Look For in a Mobile Base

Mobile bases work best on smooth floors free from large bumps and debris. The best base changes quickly and easily from a solid platform to a highly maneuverable tool dolly. At rest, a mobile base needs to be steady. You don't want your tablesaw to start sliding across the floor in the middle of a cut. And when you're done, you want it to glide easily back to its nesting place.

Lever-Action vs. Foot Pedal vs. Screw-Down

The lever-action on the Vega bases and the foot-pedal of the General, Delta and Rockler were the easiest to transition between mobile and stationary modes. These bases are a good choice for machines that get moved every time they're used.

The screw-down footpad found on the Shop Fox models automatically adjusts for an uneven floor. Bending over to screw down each foot is a bother, though, making the Shop Fox a better choice for infrequent moves on an uneven floor.



MOBILE BASES

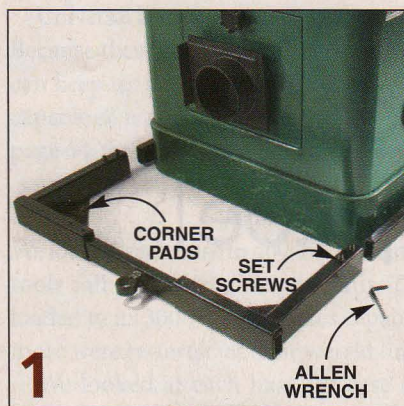
Squeeze the Most
from Your Shop Space!



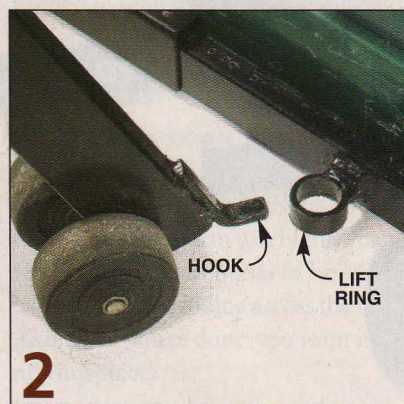
By Dave Munkittrick

VEGA

MMK-1, \$110 + \$10 handle; MMK-2 (pictured below), \$125 + handle; MMK-3, \$135 + handle



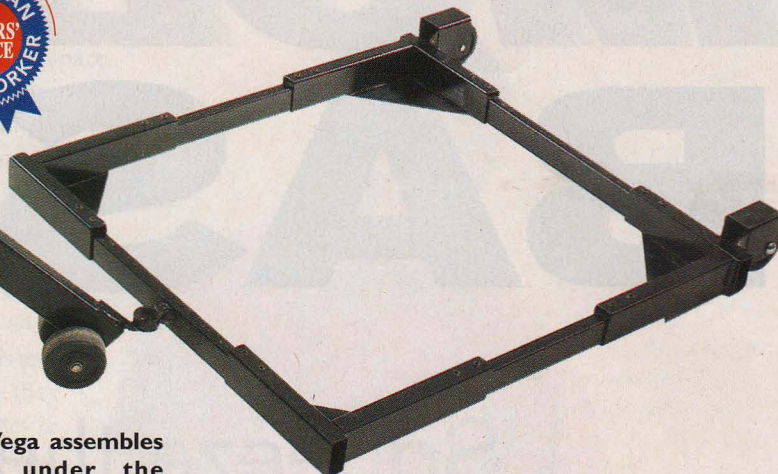
The Vega assembles right under the machine. There's no need to lift your 400-lb. tablesaw onto the base. Just tip the machine enough to slide the 1/16-in.-thick corner pads underneath and tighten a couple of set screws with an Allen wrench.



Hook, lift and go! Just hook the handle in the lift ring and you're mobile. This is an old trick that takes advantage of the power of a lever. In the resting position, no weight is left on the wheels. The machine rests on the four steel corner pads underneath, resulting in the most stable base of all.



A simple, tool-free leveler steadies the base on uneven floors. Just slip the leveler into an open tube end and give the wing-nut a couple turns until the bolt head contacts the floor.



The Vega is a unique base with a detachable handle that allows you to positively steer your machine around the shop rather than shove it in the direction you'd like to go. Even the MMK-1 can easily handle a cabinet saw, and an extension is available for the MMK-3 to fit a cabinet saw with a 52-in. fence and table extension.

PROS

The base is easy to adjust and can be assembled right under the machine (Photo 1). The "jack and trolley" system is as quick and easy as it gets when moving from a resting position to a mobile one (Photo 2). The ability to steer with the double wheels at the base of the handle makes it a dream to maneuver. The Vega is more stable in transit because any pushing or pulling force is on the base, not on the machine. Also, the lift ring can be positioned right on the center of gravity of the machine, not the base. This is a real benefit when moving machines like bandsaws whose center of gravity is way off center.

When you remove the handle, the base rests on the four 1/16-in.-thick steel corner pads. It's as though your machine were sitting on its own four feet. No weight is left on the wheels. This makes a very stable platform that won't budge and does not change the height of your machine. A separate leveler (Photo 3) takes care of uneven floors.

CONS

You have to keep track of the handle and the leveler with the Vega. And floor clearance is low by the fixed wheels.

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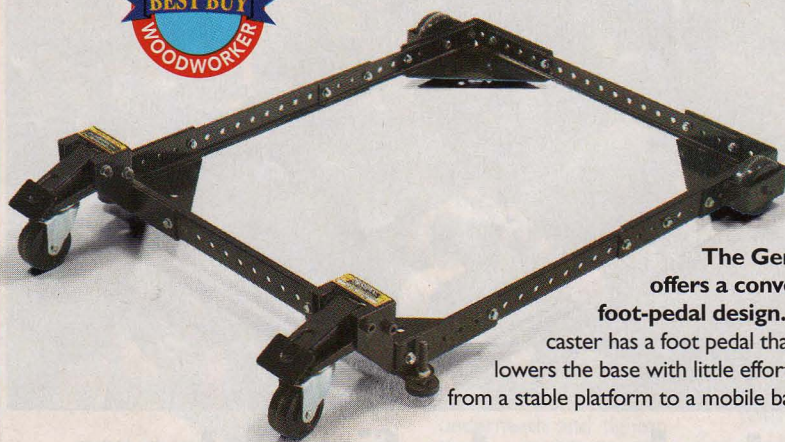
e-mail info@iwfatlanta.com or

fax a request to 770-246-0620.

GENERAL

50-025, \$50

The General is our Best Buy because it offers the best stability, mobility and capacity for the price.

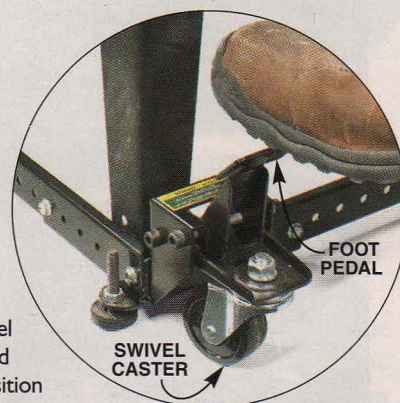


PROS

We really like the quick and easy foot-pedal lift (see inset photo). The General is capable of carrying big machines like cabinet saws and 8-in. jointers. And the General comes at a price that's hard to beat.

CONS

More than 100 parts make assembly and size adjustments time-consuming. You have to stoop over to adjust the footpads on an uneven floor.



The General offers a convenient foot-pedal design. Each swivel caster has a foot pedal that raises and lowers the base with little effort. The transition from a stable platform to a mobile base is a breeze.

CRAFTSMAN

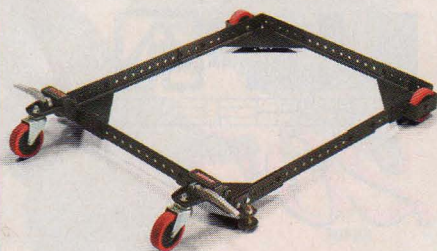
22252, \$80

HTC

HTC 2000, \$80

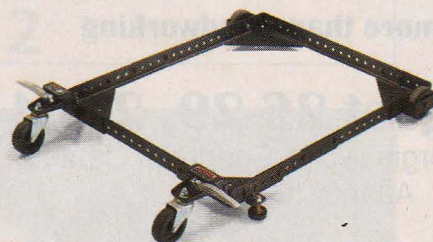
WOODCRAFT

144813, \$50

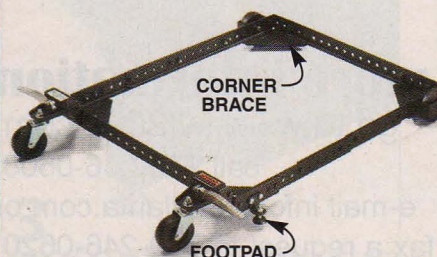


The Craftsman

features red wheels on what appears to be an HTC base.



The HTC 2000 is the original design that spawned a number of look-alikes.



The Woodcraft

base has a smaller price tag than the other two but also smaller footpads and corner braces. Even so, it performs as well as the other two.

PROS

This style of base is stable when down and, when up, wheels with ease, even with a full load.

CONS

In the 300- to 400-lb. range, we found the cam levers to be undersized for the job. We had to lift up on the machine to help raise the base off the footpads.

With over 100 parts to put together, these models require considerable time to assemble and adjust.



Adjustable footpads create a stable platform. However, they hang low and can get stuck on an uneven floor. These footpads require you to get down on the floor with a wrench to adjust. Foot-operated cam levers raise and lower the base.

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If you live in an area where TV reception is weak, 'rabbit ears' and ugly rooftop antennas may only bring in fuzzy signals that aren't worth watching. Enter the XiumAir Antenna -- the world's first spilateral antenna designed to bring in strong video and audio signals from all directions for great TV/stereo reception. Patented spilateral technology lets the XiumAir grab signals coming from all directions from as far away as 50 miles. Its 18" parabolic reflective / ground element increases signal strength and stability to give you local broadcast reception as good as, or better than, cable TV or satellite reception. There's no expensive installation required, and it's fully compatible with any TV or stereo tuner for high-energy VHF / UHF / FM reception.

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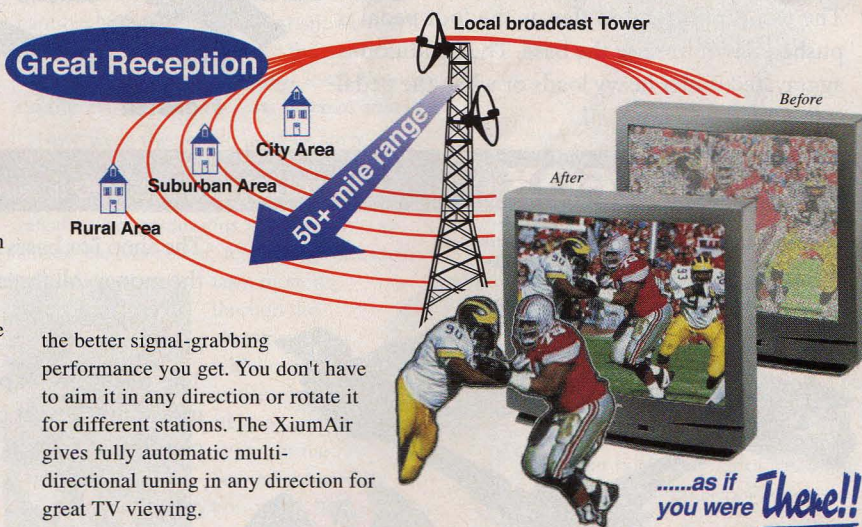
The world's first dish-type TV antenna - the last antenna you'll ever need



- NO MORE HUGE, UNSIGHTLY ROOFTOP ANTENNAS
- CLEARER PICTURE AND SOUND
- NO MORE AIMING
- EASY TO INSTALL *Anywhere!!*

XiumAir™ Works!

No matter where you live, the Xium spilateral "dish" antenna will collect all of the signals available, from any direction without the need for rotating or tuning.



the better signal-grabbing performance you get. You don't have to aim it in any direction or rotate it for different stations. The XiumAir gives fully automatic multi-directional tuning in any direction for great TV viewing.

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If you have a DSS satellite system, the XiumAir is the ideal complement for receiving local channels without monthly fees. And when high definition broadcast TV arrives in a few years, you will be ready. Plus you can use the antenna now for AM / FM stereo, home-based CB systems, and shortwave radio. The XiumAir Antenna features compact, modern styling that will blend in with almost any decor. The UV-protected housing is made of impact-resistant copolymer, making the exterior resistant to weathering and color change. It includes a standard cable connector for any cable-ready hookup. The XiumAir Antenna delivers maximum local broadcast reception to any television, stereo or any other audio or video receiver, without the use of unsightly, ugly or 'wind damaged' antennas.

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This unique design is the result of years of research and testing, and now you can try it for yourself risk-free. Each XiumAir Antenna System is handcrafted and individually tested

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DELTA 50-345 \$50

These bases are an excellent choice for smaller, lighter machines that get moved a lot. The Rockler is the one to pick for an uneven floor. That's because it lifts the footpads $\frac{3}{8}$ in. higher off the floor than the Delta.

PROS

The single-pedal design is quick and easy to operate. These bases can be custom fit to any size machine within their weight limit.

CONS

Assembly involves extra time and money because you provide the 1-1/2-in.-square hardwood rails. The wood rails tend to flex as the foot pedal is pushed down to raise the base. The condition is aggravated under heavy loads or when the pedal is mounted on a long rail.

ROCKLER 92051, \$50 (\$38 without caster assembly)

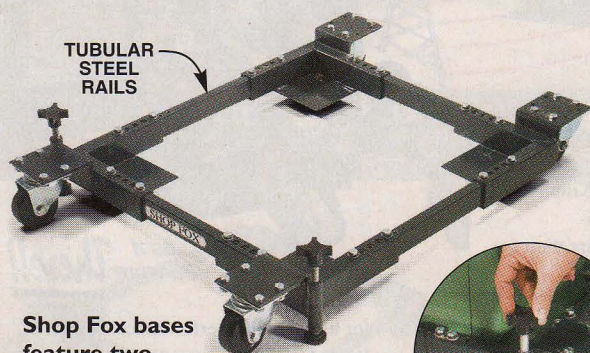


The Delta 50-345 is an old workhorse. The single-pedal design is hard to beat for ease of use and mobility. It has a realistic 300-lb. weight limit.

The Rockler 92051 features a removable caster. Two thumb screws allow it to be moved from base to base. You save money because you only need one kit with the caster.

SHOP FOX

D2260 Mini, \$60; D2057 HD (pictured below), \$70; D2058 Super HD, \$90



Shop Fox bases feature two screw-down footpads that secure the base to the floor. The screw-down feet are great on uneven floors, but are tedious to operate.

The Shop Fox bases are among the strongest mobile bases for the money. All three models feature screw-down footpads.

PROS

The bases are capable of supporting their enormous maximum-weight claims. The stiff frames provide a stable platform in transit.

CONS

The bolts that hold the steel tubes together are tightened into very shallow threaded holes in the smaller rails. If you're not careful, it's easy to strip out the threads.

The Shop Fox bases are noticeably harder to push and maneuver than the other models. When you load one over 600 lbs., it is very difficult for one person to move.

JET

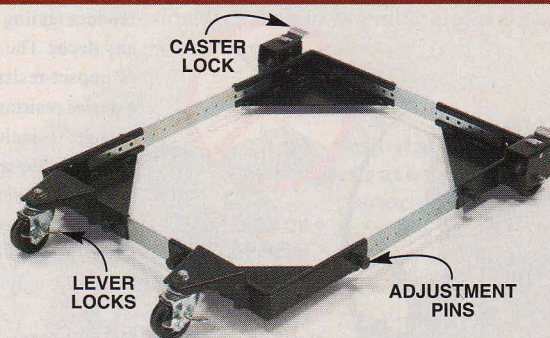
Heavy Duty 708118 (pictured below), \$70; Industrial Heavy Duty 708119, \$80

PROS

Assembly is literally a snap (see photo). The Jets have easy-to-use foot-operated locks on the fixed casters.

CONS

The swivel casters have small lever locks on the wheel hubs that can be hard to reach. The locks are ineffective because they don't prevent the wheels from swiveling. This is one of the least stable bases we tested.



The Jet really shines at assembly time. Just pull a pin on the corner assembly, slide the rail to the desired length and the spring-loaded pin pops into a hole in the rail, locking it in place.

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Agency, the air inside your home can be up to 10 times more polluted than the air outside. Most of our homes and offices are now sealed from fresh

air so indoor pollutants are kept in while natural air cleansing agents are kept out. The EPA informs us that 6 out of 10 homes and buildings are "sick", meaning they are hazardous to your health as a result of airborne pollutants. Health problems relating to this phenomenon are real—Asthma cases have increased by more than 100% since 1976. It's time to put an end to your own personal air pollution problem.

"It's so quiet I kept checking to be sure it was on. However, as the afternoon wore on, I knew for CERTAIN that it was on because in ONE AFTERNOON, my sneezing and running eyes have stopped! I vacuum daily because I am so allergic to dust. However, all the vacuuming in the world has not produced the results that one afternoon of Surround Air has."

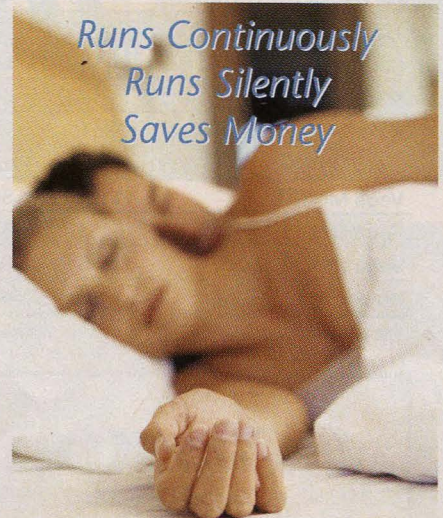
—J. McNally, Mass.

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Our goal was to find the most scientifically advanced air cleaning technology and build it for an affordable price. Well, we believe that we have succeeded beyond our wildest dreams. In a 16' x 10' room, the breakthrough Surround Air was able to remove 99.2% of all particles that were .3 microns or larger. This allowed us to capture most pollen, cat dander, molds, fungus, dust-mites and allergens that can lead to significant health problems. This test showed far better air cleaning results for the Surround Air, than for the other popular ionic cleaner on the market...*which costs twice as much!*

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through the cleaning grid while operating in complete silence—you can even run the Surround Air while you sleep. We were able to do all of this



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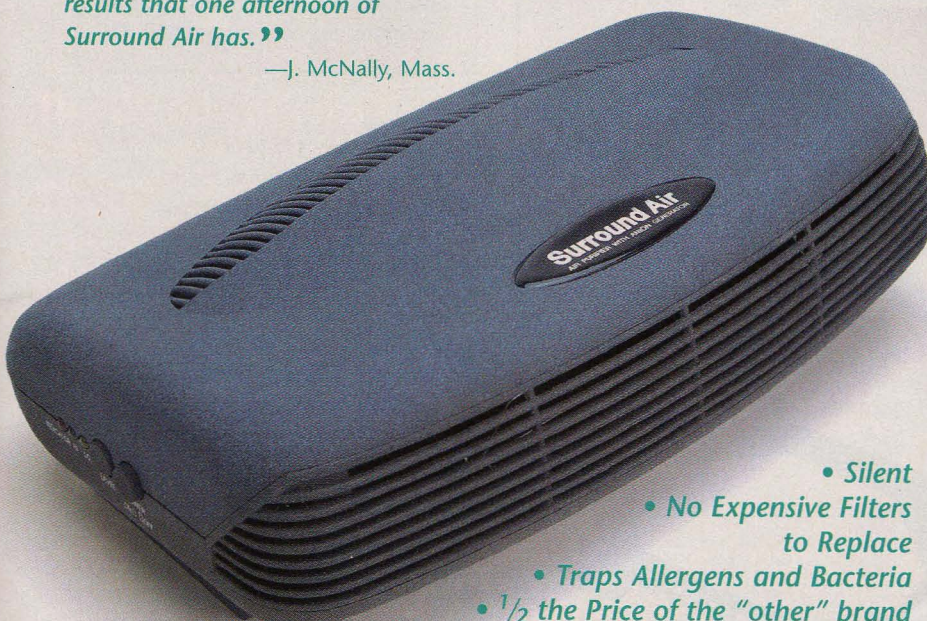
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Brand/Model	Price	Wt. Cap. Lbs.	Square in Inches	Rectangle in Inches	Accessories
Craftsman 22252	\$80	400	12 x 12 to 36 x 36	12 x 18 to 20 x 52	none
Delta 50-345	\$50	300	16 x 16 and up *	9 x 16 up to any size	none
General 50-025	\$50	500	11 x 11 to 35 x 35	11 x 17 to 19 x 51	none
HTC 2000	\$80	400	12 x 12 to 36 x 36	Up to 20 x 52	K2479 ext. rail, \$13
Jet Heavy Duty 708118	\$70	600	18 x 18 to 28 x 28	18 x 28	tablesaw ext., \$60
Jet Industrial HD 708119	\$80	1,200	24 x 24 to 34 x 34	24 x 34	tablesaw ext., \$70
Rockler 92051	\$50	600	16 x 16 up to any size *	9 x 16 up to any size	none
Shop Fox Mini D2260	\$60	600	14-1/2 x 14-1/2 to 17 x 17	10-1/2 x 14-1/2 to 17 x 21-1/2	tablesaw ext., D2259, \$60
Shop Fox HD D2057	\$70	700	20-1/2 x 20-1/2 to 29-1/2 x 29-1/2	19 x 20-1/2 to 29-1/2 x 29-1/2	tablesaw ext., D2259, \$60
Shop Fox Super HD D2058	\$90	1,300	24-1/2 x 24-1/2 to 28.5 x 28-1/2	18 x 24-1/2 to 28-1/2 x 33-1/2	lathe ext. bars, D2246, \$30
Vega MMK-1	\$120 **	800	17 x 17 to 28 x 28	13 x 17 to 28 x 29	none
Vega MMK-2	\$135 **	800	28 x 28	13 x 29 to 28 x 50	none
Vega MMK-3	\$145 **	800	28 x 28	13 x 50 to 28 x 71 ***	tablesaw ext., LSPT, \$35
Woodcraft 144813	\$50	400	12 x 12 to 36 x 36	Up to 20 x 52	none

* 16-in. min. on pedal side

** Vega prices include \$10 handle

*** 71" length fits lathe

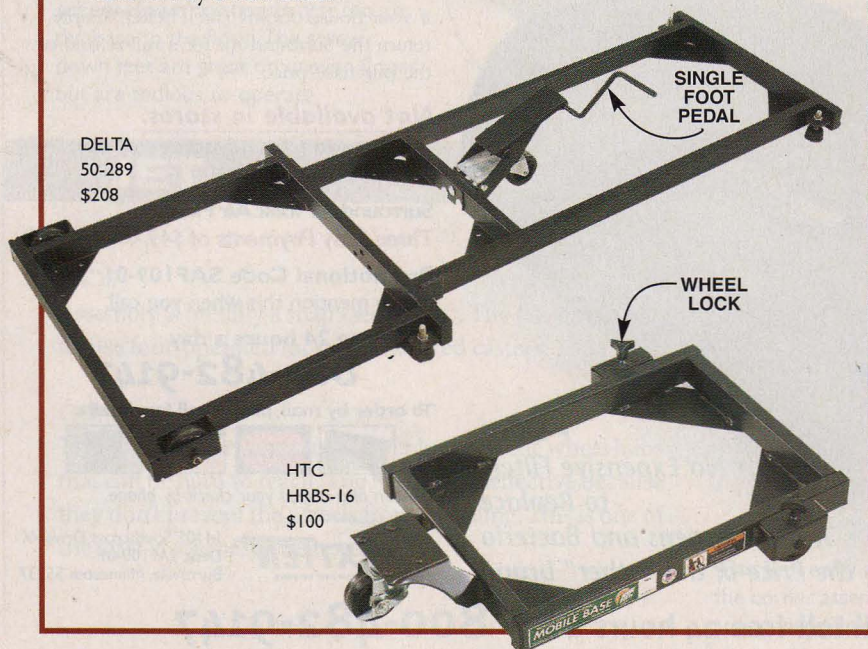
Custom Bases

Custom bases are well-built, expensive and designed to fit specific machines.

Their strength comes from the welded tubular steel frames. They come ready to go right out of the package, so you have no assembly hassles.

These bases cost from \$80 to more than \$200. The fact that they only fit certain machines means if you change machines you may have to buy a new base.

We tested some custom bases by HTC, DeWalt, Delta and Jet. They all performed well. The Delta and DeWalt were tops for ease of transition with their single foot-pedal for raising and lowering the base. The HTC and Jet are very similar in design. Both offer high floor clearance, screw-down wheel locks and a three-point stance that are real assets on uneven floors.



Average Machine Weights

14" Bandsaws	200-250 lbs.
15" Drill Presses	100-200 lbs.
6" Jointers	200-300 lbs.
8" Jointers	400-500 lbs.
10" Contractor's Saw	200-300 lbs.
10" Cabinet Saw	400-500 lbs.

Coming Soon

We had a last-minute peek at a new Woodcraft mobile base. It features an unusual design built around a single piece of 3/4-in. plywood cut to fit your machine. It is capable of carrying 600 lbs. and features foot-operated lift mechanisms. Woodcraft says the new base will be available in late spring and cost around \$60. **AW**

Sources

Craftsman, (800) 377-7414
www.sears.com/craftsman

Delta International, (800) 438-2486
www.deltawoodworking.com

General International, (514) 326-1161
www.general.ca

HTC, (800) 624-2027

Jet Equipment, (800) 274-6848
www.jettools.com

Rockler, (800) 279-4441
www.rockler.com

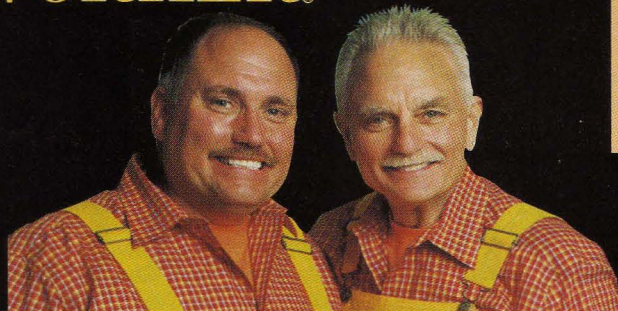
Shop Fox, (800) 840-8420
www.shopfoxtools.com

Vega Enterprise, (800) 222-8342
www.vegawoodworking.com

Woodcraft, (800) 225-1153
www.woodcraft.com

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Tips of the Month

Padding Your Workbench

Just as a chef needs to ensure his cutting board won't slide around while he is working with some sharp cutlery, a steady work surface is equally important to woodworkers. While the chef solves his problem with a damp towel between his cutting board and his stainless steel kitchen surface, woodworkers often solve the problem with a bench vice or clamps. However, there are times when clamps or a vice can get in the way.

Unfortunately, when working with wood, a wet towel can literally damage the project. Instead, why not consider using a chunk of carpet pad. This choice will not only keep your work from slipping around on an otherwise smooth or slick workbench, but it will protect the project from damage as well. Rebond pad is our favorite, but rubber padding works well too. No slipping or sliding means improved safety conditions.

We are proud to be associated with the premier woodworking magazine, and we are pleased to offer the following tips:

Tennis Anyone?

The polishing stage of your woodworking projects can be laborious at best. It can also hurt your hand if you happen to be using steel wool as the polishing material. Here's a simple tip to help keep your hands as smooth as the wood you're working on. Cut a tennis ball in half and use the hollow area to hold your steel wool pad. The fuzzy outside surface of the ball is harmless and easy to hold on to. You really will be surprised how well the soft rubbery inside grips the steel wool.

By the way, did you know that you can extend the life of sandpaper by cleaning it from time to time? An eraser works well at voiding pores of paint and putty build-up. A stiff bristle brush also works well.

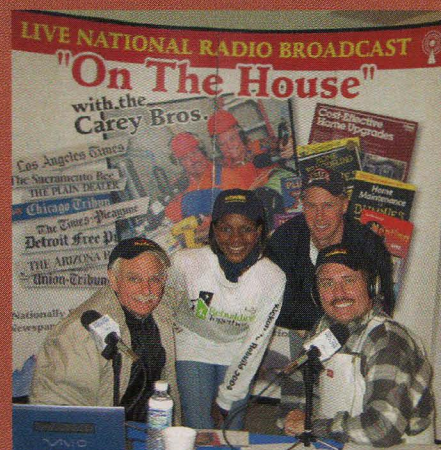
Ask the Carey Brothers a woodworking, home improvement or remodeling question on their live radio broadcast every Saturday from 9:00 a.m. to 1:00 p.m. Eastern Time. Call toll-free at 1-800-737-2474 to ask your question. Visit their website at www.onthehouse.com for recaps of the show and other helpful info.

The Woodworker's Corner

A note from the Publisher of American Woodworker, Jim Schiekofer

As the leading woodworking magazine, American Woodworker continually searches for ways to serve inform, and feed the passion of our loyal readers. This month we are excited and proud to welcome the Carey Brothers of On The House, a nationally syndicated newspaper column and radio show of the same name. They'll be providing us with handy "Tips of the Month" that relate to articles within our magazine and woodworking in general. James and Morris Carey are nationally recognized experts on woodworking, home building and renovation with over 30 years of experience as award-winning, licensed contractors. We encourage our readers to tune in to their radio program and visit their website at www.onthehouse.com. Listen every Saturday for the new Woodworker's Corner feature, where they will focus specifically on woodworking issues and topics. Don't forget to check back here every issue for more exciting news in the Woodworker's Corner.

Speaking of news, on Friday, January 30th the American Woodworker team joined sister publication The Family Handyman and the Carey Brothers in supporting and participating in the benevolent work of Rebuilding Together. For the second straight year, The Family Handyman was a sponsor of the annual Kickoff To Rebuild, an officially sanctioned Super Bowl event chaired by NFL Commissioner Paul Tagliabue and his wife Chandler. Our team joined NFL players, personnel from title-sponsor IRWIN Industrial Tools, other sponsors and volunteers in rehabilitating two homes in the greater Houston area. The Carey Brothers broadcast live from the event and their celebrity interviews included Miss America and NASCAR driver Ken Busch.



From Left to Right:

Morris Carey; Miss America, Erica Dunlap;
Jim Schiekofer, Publisher of The Family
Handyman; James Carey

Mission Bookstand



*Display your
scrapbooks, photo
albums and
woodworking skills*

By Tom Caspar



Woodworkers like to see how things work, right out in the open. We love looking at gears, levers and cams, and when it comes to furniture, there's nothing more fascinating than exposed joints, like dovetails and wedged tenons. This bookstand is held together entirely with wedges: no glue, screws or dowels. When you give the wedges a satisfying tap home, the stand is solid as a rock. These joints are extra strong because the wedges fit into precisely tapered holes.

Wedged joints look awfully complicated to make, but take heart. We've worked out a surefire method that's really quite simple. The key tool is a router equipped with a top-bearing flush-cutting straight bit. It works so well with a shop-made jig that you could use it to build virtually any size bookcase or shelving unit with tenons that extend all the way through the sides.

Tools and Materials

The machines you'll need are the basic equipment for building any piece with rough lumber: a tablesaw and crosscut sled, jointer, planer, drill press and router. A bandsaw is handy, but a jigsaw will do. As for tooling, you'll need a slot-cutting router bit (\$33), a 1/2-in.-dia. top-bearing pattern bit (\$20), a 3/4-in. Forstner bit (\$6) and a 7/8-in. Forstner bit (\$7). You'll also be doing some handwork with chisels. We recommend using 1/2- and 3/4-in. bench chisels and a 3/8-in. mortising chisel (\$30), but you could get by with only a 1/2-in. bench chisel. (See Sources, page 79, for all of these items.)

This bookstand is built in the Mission style, popular about 100 years ago. The wood of choice back then was 1-1/4-in.-thick quartersawn oak. We used cherry, a common substitute today, because it's easier to find than extra-thick quartersawn oak. Like oak, cherry holds a crisp edge, but it's easier to pare with a chisel.

You'll need about 50 bd. ft. of 5/4 (1-1/4-in.-thick) lumber, which costs about \$400. For the bookstand's sides, we selected cherry boards that showed little or no light-colored sapwood on front and back. (You can see both faces of the sides when the bookstand is empty.) Sapwood-free boards are hard to find these days, however, and they're not strictly necessary. Sapwood is okay if it faces in. After



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Fig. A
Exploded View

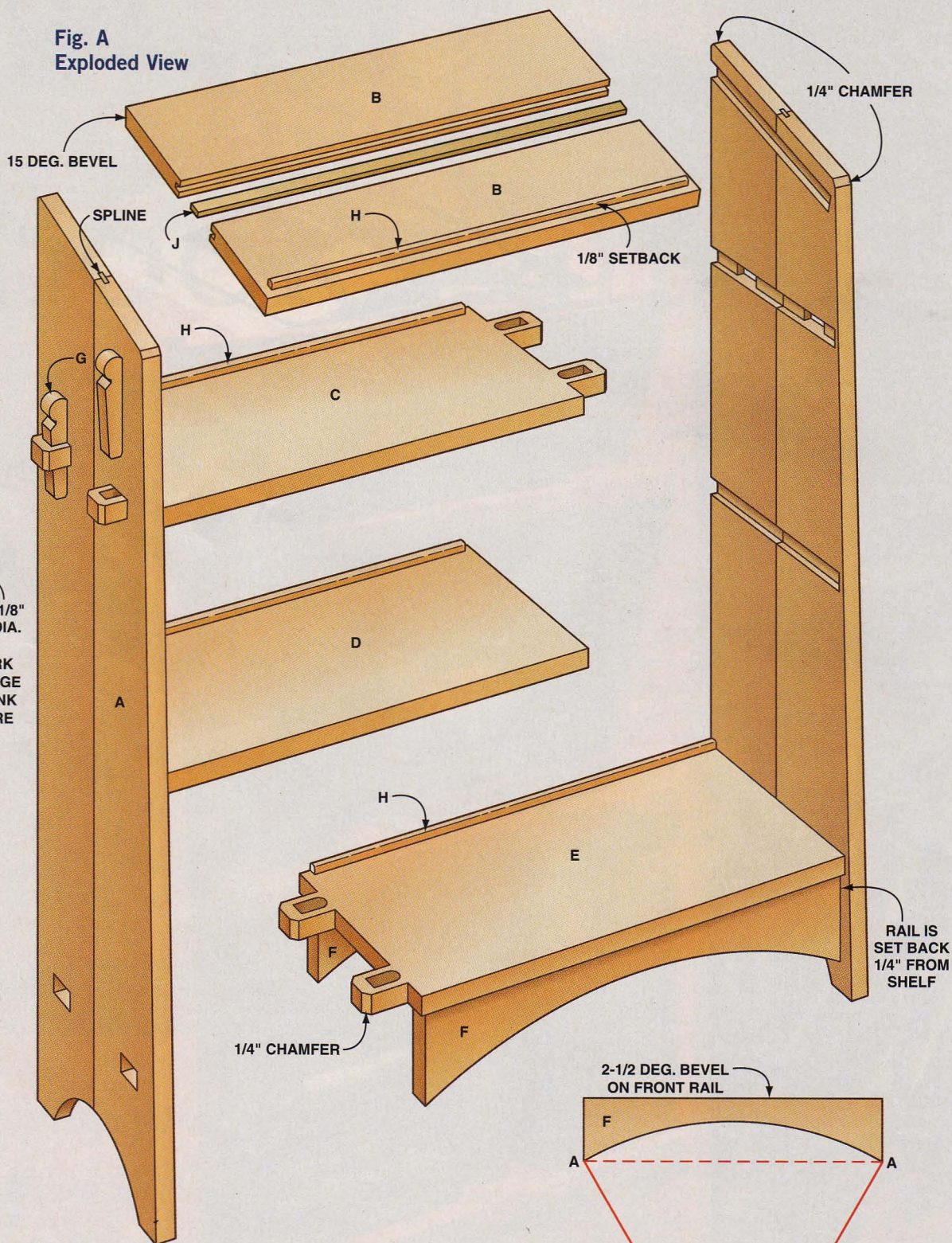


Fig. B
Wedge
(Enlarge
200%)

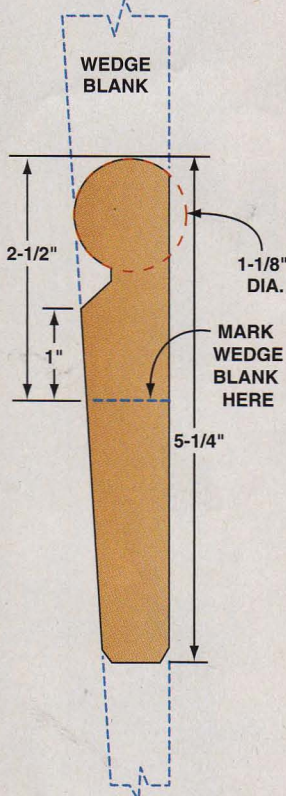
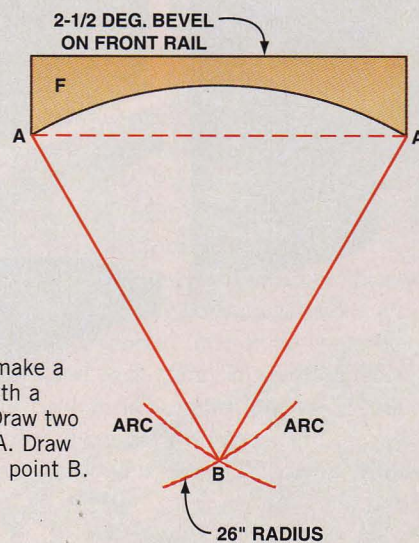


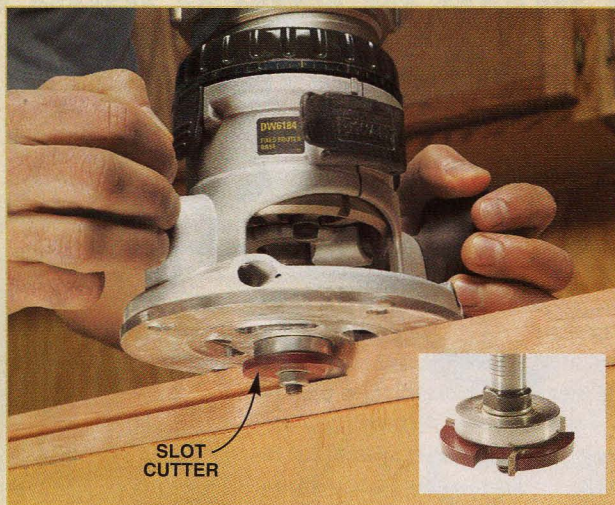
Fig. C
Layout of Rail

To draw the arc, make a beam compass with a radius of 26 in. Draw two arcs from points A. Draw the rail's arc from point B.





1 Plane every board 1 in. thick. To prevent snipe (that nasty depression at the end of a board), butt one piece up against another as you feed them into the planer.



2 Rout grooves down the entire length of every glue joint for the sides and shelves. A slot cutter with a bearing on top makes a consistently accurate cut. Offset the groove from the center, so you can always be sure which side is the face.



3 Push a spline into a groove, without glue, then spread glue alongside the spline. The spline aligns the boards amazingly well when it fits very snugly in the groove. If you put glue on the spline or in the groove, you might have trouble assembling the joint.



4 Clamp the boards together and check for flatness with a straightedge. Be fussy and adjust the heads of the clamps up or down until the boards lay absolutely flat under moderate clamp pressure.

all, once the bookstand is full of books, the insides really don't show.

Prepare the Lumber

1. Mill all the lumber for the sides (A) and shelves (B, C, D and E) at the same time. Plane the pieces in stages to make absolutely flat boards. First, joint one face and plane the wood to 1-1/8-in. thick. Let the wood set for a few days.
2. Re-joint all the boards and plane them down to 1 in. (Photo 1). Joint

one edge of each board and rip it to width. Joint the second edge.

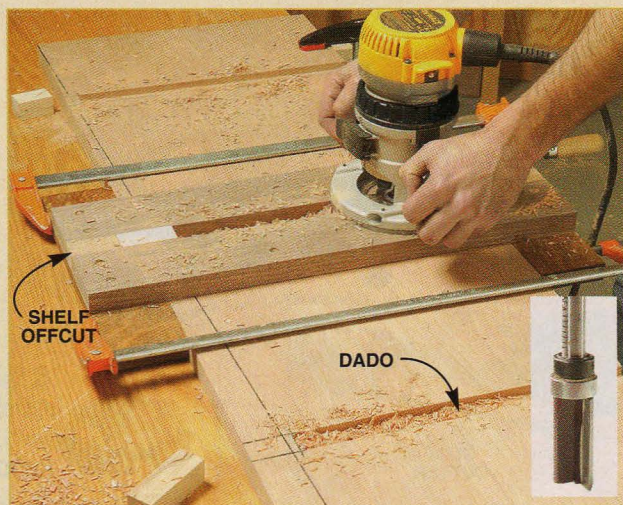
Glue the Sides and Shelves

3. After gluing, the sides and shelves should be flat and the joints even. The key to making even joints is to align them with a spline. Use a slot cutter to rout 1/4-in.-deep grooves down the full length of all the edges that will be glued (Photo 2).
4. Make splines that fit *tightly* in the

grooves. Use cherry, because it will show on the tops of the sides. Sand the edges of the splines so it's easy to tap them into the grooves (Photo 3).
5. Glue the sides and shelves together (Photo 4).

Lay Out the Sides

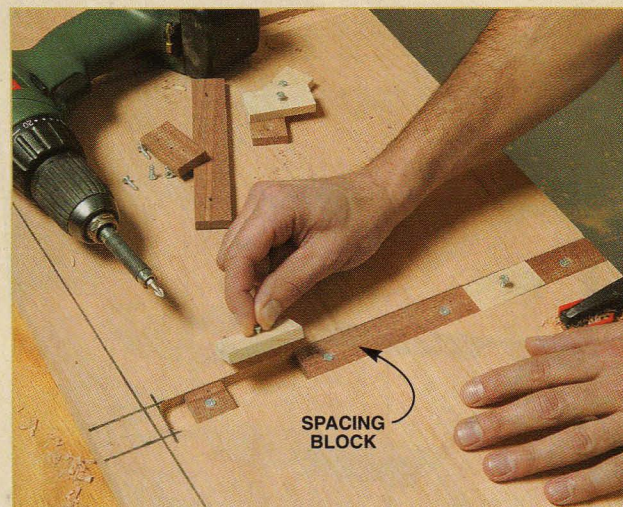
6. The sides remain rectangles until all the joinery is complete. Rip the sides to width and cut them to length with a crosscut sled.



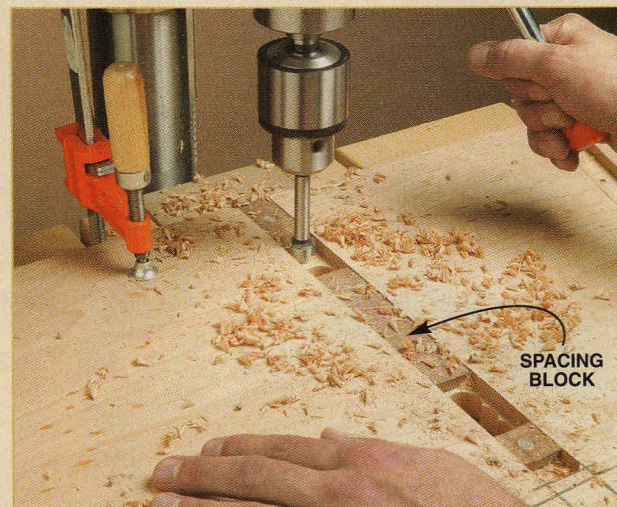
5 Rout stopped dados with a jig and a top-bearing pattern bit (see inset). Scrap pieces of shelf built into the jig make the width of the dado exactly match the thickness of the shelf.



6 Rout the dado for the slanted top shelf. Remove the guide boards from the end of the jig and screw the jig directly to the side of the bookstand. The screws go in waste areas that will be cut off later.



7 Screw temporary spacing blocks into the dados. Remove two of the blocks. The openings outline the mortises you'll be cutting through the bookstand sides.



8 Drill out the bulk of each mortise with a Forstner bit. Support the workpiece on a large board attached to your drill press table. Drill over a clean area of the support board so you don't get any chip-out.

7. Draw the dados that receive the shelves on the inside face of each side (Fig. J, page 78). Draw the angled top and front of each side.

Cut the Dados

8. Make a router jig to cut dados for the shelves. (Fig. D, page 78). Assemble it on a bookstand's side to ensure it's square and fits tight.

9. Cut dados $\frac{3}{8}$ in. deep with a top-bearing pattern bit (Photo 5).

Line up the jig with the dados as drawn on the sides. Start the bit in the hole in one end block. Insert different filler pieces into the jig's slot to make dados of different lengths.

10. Square the end of the dados with a chisel. Use the jig as a guide.

11. Rout the dados for the slanted top shelf (Photo 6). Line up the end of the jig's slot with the end of the dado as drawn on the workpiece.

Cut the Mortises

12. Cut a set of spacing blocks to guide your router when making the mortises (Fig. G, page 78). Start from the open end of the dado and screw the blocks in place one at a time.

13. Drill the mortises with a $\frac{3}{4}$ -in. Forstner bit (Photo 8). Stay $\frac{1}{8}$ in. away from the spacing blocks. Drill two outer holes first, then drill a center hole.

14. Carefully place the router in the

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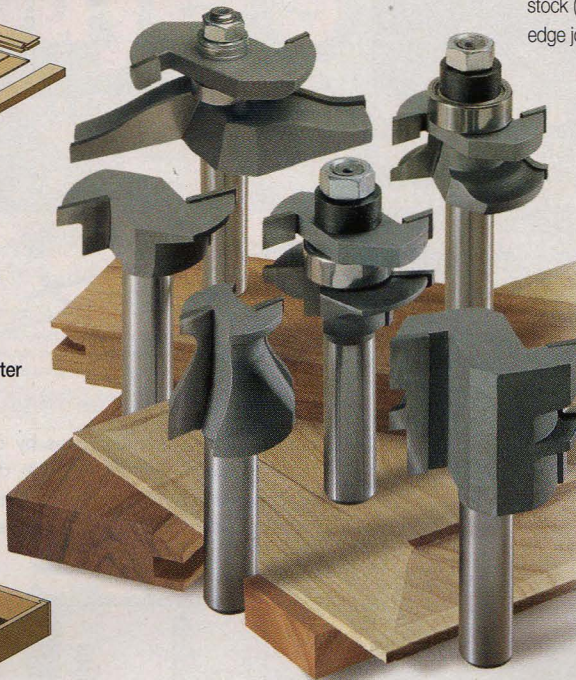
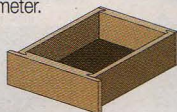
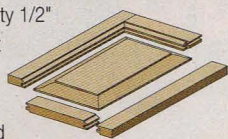
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1-3/4" large diameter.

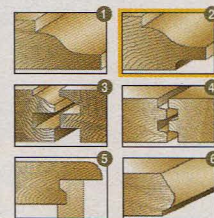
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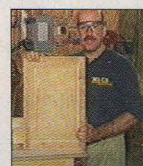
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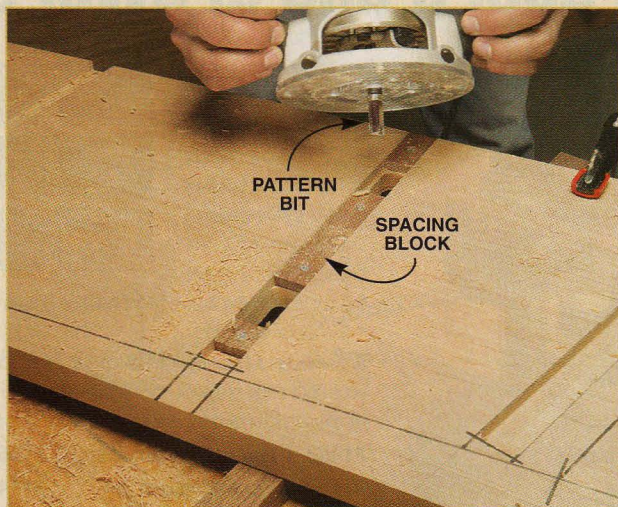
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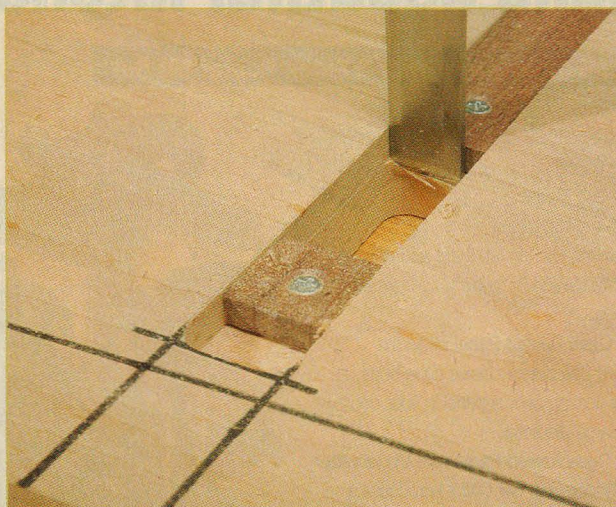
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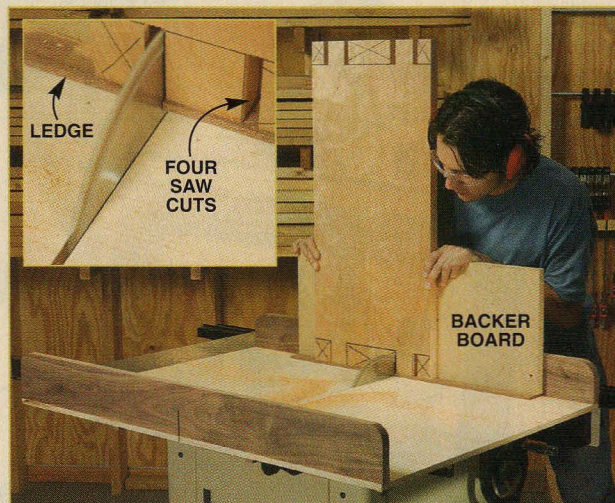
9 **Rout** all around the mortise with a top-bearing pattern bit. The spacing blocks and the edges of the dado guide the bit. You get mortises with perfectly straight sides.



10 **Finish** the mortises by chopping the corners square. Guide your chisel with the spacing blocks. Chop only halfway through from this side, then flip the workpiece over and chop from the other side. Remove the spacing blocks.



11 **Mark** the ends of each shelf's tenons directly from the mortises. Also, clearly mark each piece so you can put them back together the same way.



12 **Cut** the sides of the tenons. Fasten a tall backer board onto a crosscut sled for support. The backer board has a 1/4-in.-thick ledge attached to its bottom. Line up the tenon marks with the kerf on this piece to make an accurate cut right on your line (see inset). Make four cuts side-by-side.

hole so the bit doesn't touch the sides, then rout all around the mortise with the top-bearing pattern bit (Photo 9).
15. Square the corners of the mortises with a 3/4-in. chisel (Photo 10). Use a flat file to ensure every corner is truly square. Sand over the outside edges of the mortises so they don't chip out.

Cut the Tenons

16. Rip the two long shelves (C and E) to width and cut them to length.

Try fitting their ends into the dadoes. If they're too tight, sand or plane the underside until they drop in place. A slightly loose fit is ideal.

17. Assemble and mark the shelves and sides. Draw the ends of the tenons on the shelves (Photo 11). Remove the shelves and continue the tenon layout lines onto the face of the shelves.

18. Saw the tenons (Photo 12). Raise the blade so it cuts 1/32 in. above the tenon's shoulder line. Overcutting

eliminates the need for fussy cleanup work later, and it doesn't show.

19. Remove the rest of the waste with a jigsaw or bandsaw, staying 1/16 in. away from the shoulder lines. Then guide the router right on the shoulder lines with a 1/2-in.-thick template (Photo 13 and Cutting List, page 79). The template ensures both shelves are the same length.

20. File or chisel 45-degree chamfers on the end of each tenon.

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Case Machinery 290	144, 348, 516	None	1/2 HP 2.3A 110V	3,580	Both sides		
Central Machinery 3750S	200	1/4, 3/4, 3A, 1G	1/2 HP 2.3A 110V	3,580			
Champion Electric	180	None	1/2 HP 2.3A 110V	3,595			
Cushman 2190S	199	3/8	1/2 HP 2.3A 110V	3,725	Both sides	Cast iron base; fence 2' tall	
Deia 14-651	144, 516, 516, 1G	1/4, 5/8, 3A, 1G	1/2 HP 5A 110V	1,725	Both sides		
Deia 14-651S	144, 516, 516, 1G	1/4, 5/8, 3A, 1G	1/2 HP 5A 110V	1,725	Both sides		
Fest 87M80	44252	250	none	10-14P	1,725	Both sides	
General Int'l. 75-250-31	350	1/4, 5/8, 3A, 1G	1/2 HP 4A 110V	1,720	Both sides		
General Int'l. 75-250-31S	350	1/4, 5/8, 3A, 1G	1/2 HP 4A 110V	1,720	Both sides		
Melroe 550	239	1/4, 3/8, 1G	1/2 HP 4A 110V	3,470	Both sides		
Melroe 550S	239	1/4, 3/8, 1G	1/2 HP 4A 110V	3,470	Both sides		
Melroe PM402	1209	None	1/2 HP 115V 120V	3,470	Both sides		
Melroe PM422	1595	3/16, 1/2	1/2 HP 3A 110V	3,470	Both sides		
Melroe PM432	549	1/2	1/2 HP 1A 110V	3,470	Both sides		
Recap 1000 Shop Fox W-101	265	1/2	3/4HP	3,450	Both sides		
Woodward 876	175	240	1/2 HP 4A 110V	1,725	Right-hand only		
Woodward 876	389	None	1/2 HP 4A 110V	1,725			

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TOOL TALK: MID-SIZE CORDLESS DRILLS

TOOL TALK: MID-SIZE CORDLESS DRILLS

the chuck itself open. To shift right in a minute or so, the drill's clutch will automatically disengage the bit from the motor's powertrain. As the bit is turned right, you will feel the bit's teeth back into the drill's arbor, and the drill will stop rotating when the bit is positioned at the desired depth. The clutch will then lock the bit in place, and the drill will stop rotating.

Most drills have a clutch setting for drilling into wood. Fully, the clutch will disengage the bit from the motor's powertrain. As the bit is turned right, you will feel the bit's teeth back into the drill's arbor, and the drill will stop rotating when the bit is positioned at the desired depth. The clutch will then lock the bit in place, and the drill will stop rotating.

Handle Box
The front of the handle is another important feature: many cordless drills have a "handle box" that is a separate piece of plastic that is attached to the handle. The handle box is designed to hold the handle in place, and it is designed to hold the handle in place.

Handle Control
The handle control is a trigger switch that is located on the handle. It is designed to allow the user to control the drill's speed and torque. The handle control is a trigger switch that is located on the handle.

Chuck Capacity
The chuck capacity is the maximum size of bit that the drill can hold. It is measured in inches. The chuck capacity is the maximum size of bit that the drill can hold.

Low-Back Chuck Settings
The low-back chuck settings are the settings that allow the user to adjust the drill's speed and torque. The low-back chuck settings are the settings that allow the user to adjust the drill's speed and torque.

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Battery

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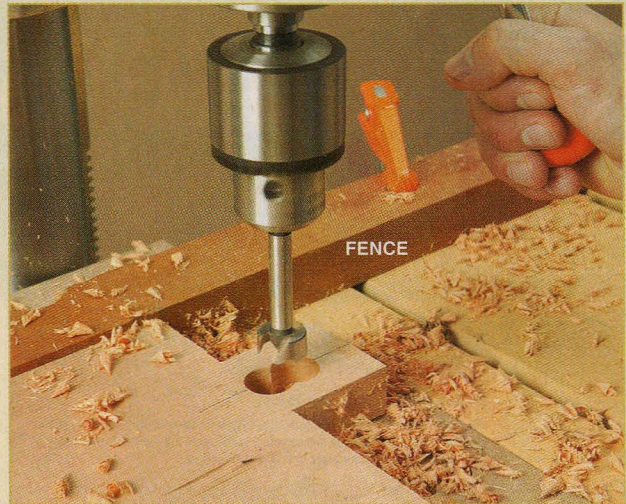
ILLUSTRATIONS: PHOTODISC CORP.

Complete Tool Tests

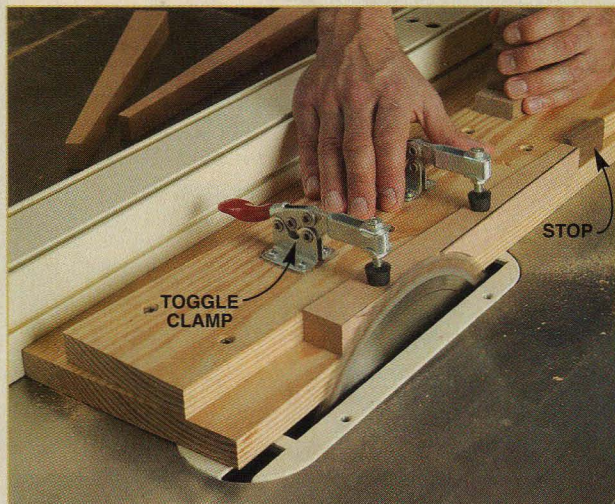
Click on these links, and you'll be able to download copies of *American Woodworker* Tool Tests, the most complete and detailed in the industry. Learn what features are really important, which tools have them, and which tools we recommend, either as an Editors' Choice or Best Buy.



13 Rout a straight shoulder on each shelf with a plywood template and pattern bit. You don't have to rout the area where the four saw cuts are.

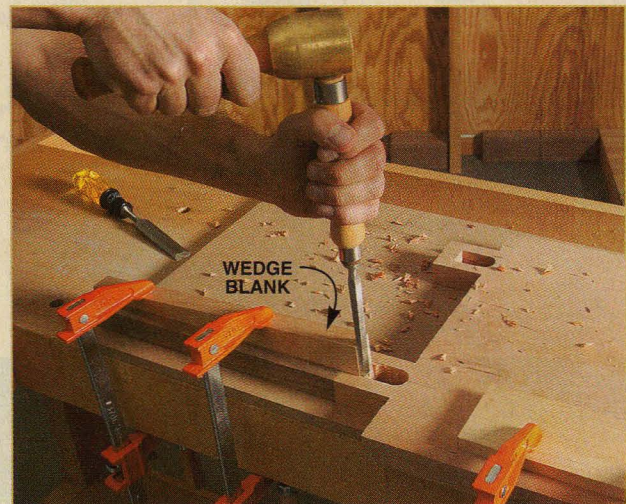


14 Drill out the mortises in the shelves with a Forstner bit. Hold the shelf against a fence. Drill the end holes first, then come back and clean out the middle.



15 Cut wedges on the tablesaw. Build a simple jig with toggle clamps and a stop to safely hold these small pieces. Bandsaw most of the waste first so there's no dangerous offcut.

Caution: The guard must be removed to use this jig.



16 Chop the end of each mortise at the same angle as the wedge. This jig uses an actual wedge to guide the chisel. Just as it comes off the saw, the bottom end of the wedge has exactly the same taper as its long side.

21. Test-fit the tenons in the mortises. If the tenons are too wide, take the shelf back to the tablesaw and cut them a little bit narrower. Fine-tune the fit until the shelf drops through the mortises without any persuasion from a mallet.

Cut Mortises in the Tenons

22. Draw a centerline down the length of each tenon (Fig. E, page 78). Mark the centers of the holes and drill (Photo 14).

23. Build a small sled (Fig. F, page 78) and cut the wedges on the tablesaw (Photo 15). Hold the wedges with toggle clamps (see Sources, page 79).

24. Glue up an angled guide block using an extra wedge (Fig. H, page 78). Just rub the two pieces together, without clamping. Chop the end of the mortises with a 3/8-in. mortising chisel (Photo 16). Take light shavings to begin; then hold the chisel tight to the angled block for the final cut.

Complete the Wedges

25. Re-assemble the sides and two shelves with tenons. Tap in the wedges. **26.** Mark each wedge above each tenon and label them (Photo 17).

27. Make a copy of the wedge's profile, and cut it out (Fig. B, page 68). Line up the tenon mark on this pattern with the mark on each wedge blank. Trace around the profile and saw the wedge on the bandsaw. Chamfer the bottom of the wedge on all four sides.

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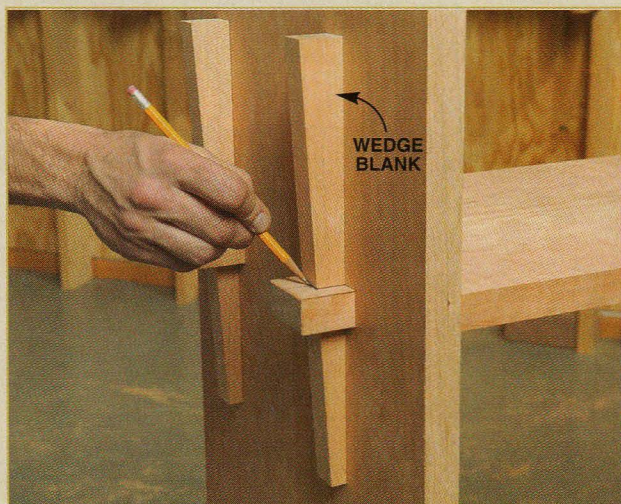
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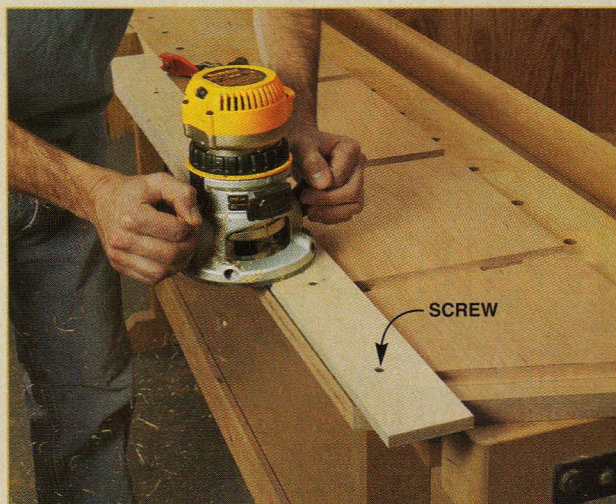
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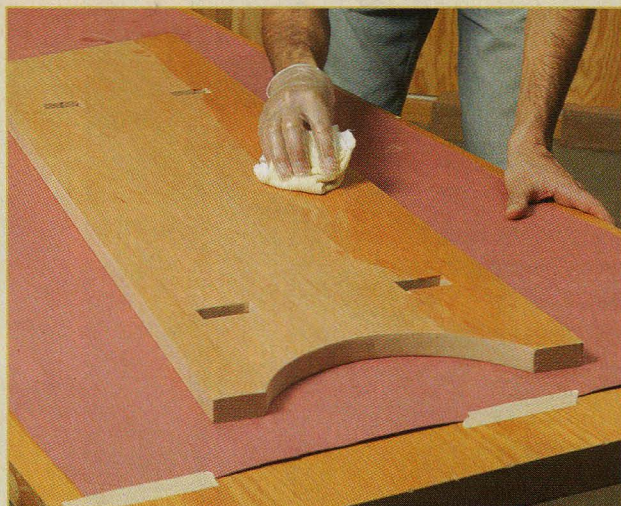
www.rainhandler.com/fh



17 Assemble the bookstand and mark each wedge for a specific mortise. Some wedges may go in a bit farther than others. Cut them all so they stick up the same amount.



18 Rout the front and top of the bookstand's sides with a straightedge and pattern bit. Cut close to the line first with a jigsaw or bandsaw. Fasten the straightedge to the side by screwing it into the dados.



19 Finishing is easy because you can tackle each piece separately. This way, you won't have any troublesome inside corners to deal with.



20 Assemble the bookstand and pound in the wedges with a few hard taps. The power of the wedges to stiffen the case is truly awesome!

Oops!

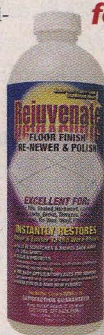
Jeepers! These two boards make an unhappy mismatch: one's light and the other's dark. I didn't see this problem coming until I put the finish on. Believe me, they looked the same color when I glued them together!

I'm stuck with this mistake, but next time I'll check the color of all my boards first and cut and glue later. Simply wetting a planed board with a damp sponge gives a good idea of what color the board will be with a clear finish on it.

An Important Message for Those with Hardwood Floors

Is it Possible to do a \$3,200 "Refinishing" Job on Your Hardwood Floors for Only \$20?

When you first glimpse a solid hardwood floor, you sense the richness, warmth and natural beauty. Hardwood floors can be beautiful, but any homeowner knows that they get scratched and dulled from furniture and everyday foot traffic. Dirt, grit and furniture legs are your hardwood floor's worst enemies—they act like sandpaper on the finish, causing scratches, dents and dulling.



One Easy Application Lasts for 6 Months!

Just Pour and Mop. Dries to a clear and luxurious finish in under an hour.

- Fills in scratches and eliminates dull spots
- Provides enhanced traction to slippery floors
- Seals and protects from scratches, stains, yellowing, detergents, scuff marks and powdering

One Bottle Covers 325 sq.ft.

Refinishing sealed hardwood floors can cost the average homeowner over \$3,200!

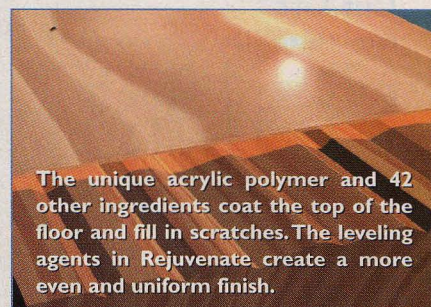
That refinishing process creates so much dust that many homeowners need to put their furniture in storage and move into a hotel for up to a week in order to complete the refinishing process. Worse yet, chemicals used in refinishing a hardwood floor can give off dangerous fumes and are often flammable. Instead, most homeowners neglect their fine hardwood floors and let them become more and more scratched. The once elegant finish just gets duller and duller.

What can you do instead? Joe McDonnell and 2 other chemists from the University of Miami invented a revolutionary acrylic polymer that will renew sealed hardwood floors at a price of less than \$20 for 325 square feet. It's called "Rejuvenate" and it gives a new life to

sealed hardwood floors. It improves the appearance of sealed hardwood without costly sanding and refinishing. Just pour it on and mop it in. It will dry in under an hour and the acrylic finish will fill in scratches and greatly improve the shine of your floor. We did a gloss rating test on a badly scratched wood floor and we were able to improve the optical brightness from

a very dull "20" all the way to a highly reflective "96". The special formulation of acrylic polymers and 42 other ingredients coats the top of the floor and fills in scratches. The unique acrylic formula protects the hardwood from stains and discoloration. The leveling agents in Rejuvenate create a much more even and uniform finish. But unlike a wax, there is no build-up, no yellowing and your floors get less slippery.

Not Just for Wood. Our chemists own more than a dozen patents and have developed surface refinishing techniques for the military. They made an amazing discovery when testing Rejuvenate. Not only would the formula work on sealed wood, but it was also remarkable on tile, stone, and linoleum. The exclusive polymer formula improved the shine and protected the flooring on all of these surfaces. The formula



The unique acrylic polymer and 42 other ingredients coat the top of the floor and fill in scratches. The leveling agents in Rejuvenate create a more even and uniform finish.

EXCELLENT FOR ANY SURFACE:

- Sealed Hardwood
- Ceramic Tile
- Laminates
- Marble
- Slate
- Grout
- Terrazzo
- Concrete
- Linoleum
- No-Wax
- Vinyl
- Fiberglass

created a rock hard barrier between the foot traffic and the flooring surfaces. If you look at floors with a microscope, its hard to believe how the day-to-day wear and tear on a floor creates crevices in tile, stone, linoleum and wood. It makes sense to protect your floors with Rejuvenate. So avoid the costs and inconvenience of floor refinishing. Don't move out—just Rejuvenate!

We are so sure that you will love Rejuvenate, that we offer our 30-day guarantee. Just return the unused portion for a refund of the full purchase price.

Rejuvenate is not available in stores.

Call now to take advantage of our special direct offer.

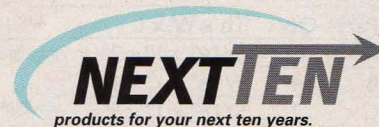
Rejuvenate™ Floor Finish \$19.95 +S&H.
Promotional Code REJ136-01

Please mention this when you call.

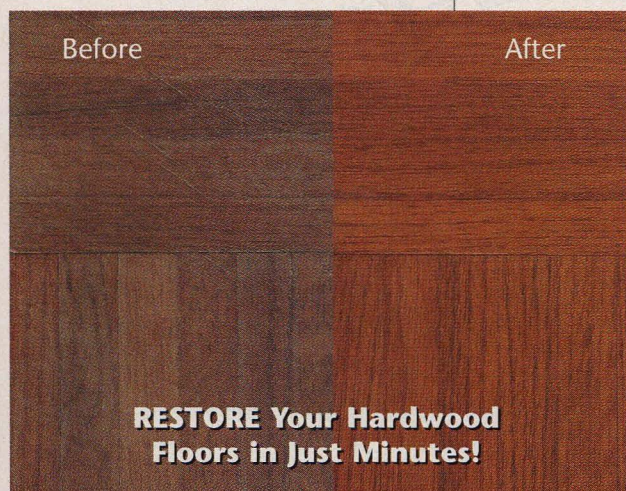
Toll-Free 24 hours a day
1-800-386-5195



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To order by mail call for details.



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Burnsville, Minnesota 55337



1-800-386-5195 WWW.NEXTTEN.COM

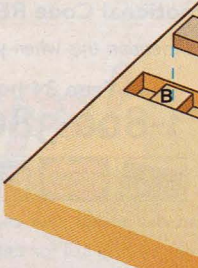
Qty. Th x W x L

2	15/16" x 3" x 20-1/2"
2	15/16" x 1" x 2"
2	3/4" x 3" x 12"
1	15/16" x 1" x 2-13/16"

* Loose pieces.

Fig. E is a detailed cross-sectional view of a mortise and tenon joint. It shows a rectangular tenon (labeled 'TENON SHOULDER') fitting into a rectangular mortise. The tenon has a width of $2\frac{1}{8}"$ and a height of $1\frac{7}{8}"$. The mortise has a width of $3\frac{1}{4}"$ and a height of $1\frac{1}{4}"$. The front edge of the mortise is labeled 'FRONT EDGE OF MORTISE'. The center holes on the tenon are labeled 'CENTER HOLES ON TENON' and have a diameter of $\frac{7}{8}"$. The diagram illustrates the precise fit and alignment of the joint components.

Fig. G
Spacing
Blocks
for the
Dadoes



The diagram shows a perspective view of a rectangular workpiece. A rectangular groove (dado) is cut into the top surface. A small rectangular block, labeled 'B', is shown fitting into the groove. A dimension line with arrows indicates the width of the block 'B' is equal to the width of the groove.

Part	Qty.	Th x W x L
A	12	5/16" x 1" x 2"
B	4	5/16" x 1" x 1"

Part	Qty.	Th x W x L
A	12	5/16" x 1" x 2"
B	4	5/16" x 1" x 1"
C	2	5/16" x 1" x 5"
D	2	5/16" x 1" x 6-1/4"

Fig. J
Layout of the Sides

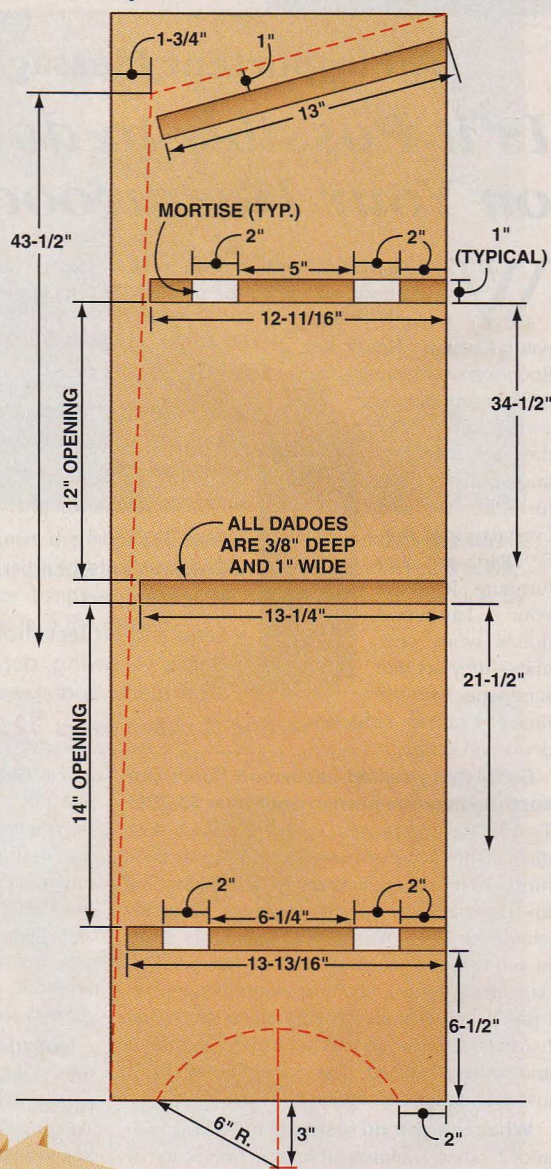


Diagram of a wedge blank G. The blank is a rectangular prism with a length of $11\frac{5}{16}$ " and a width of $2\frac{1}{16}$ ". The height is $1\frac{1}{16}$ ". The top surface is labeled "SAWN SIDE". The bottom surface is labeled "WEDGE BLANK G". The right end is labeled "SQUARE CORNER". The right end face has a height of $3\frac{1}{4}$ " and a width of $9\frac{1}{16}$ ".

Complete the Sides

28. Rough cut the front and top of the bookstand's sides. Make a 1/2-in.-thick straightedge, then finish up these edges with a router (Photo 18). Take light cuts, because the bit only has a 1/4-in. shank.

29. Draw arcs on the bottom of each side and cut them out.

30. Chamfer the top corners of the side with a block plane or file and sandpaper (Fig. A, page 68). Slightly round over every edge with 120-grit sandpaper.

Add the Rails and Sliding Shelves

31. Assemble the bookstand and tap all the wedges back into place. Cut the rails (F) so they fit tight in between the sides. Rip the top edge of the front rail so it matches the angle of the sides (Fig. A, page 68).

32. Draw an arc on the bottom of each rail (Fig. C, page 68). Saw the arc and smooth it with a file, large sanding drum or sandpaper.

33. Glue each rail to the underside of the lower shelf. The rail is set back 1/4 in. (Fig. A, page 68).

34. Rip the loose shelves (B and D) to fit the case. Rip the back edge of the top shelf to match the angle of the case (Fig. A). Trim the shelves 1/16 in. shorter than the inside distance between the bottoms of the dados. This clearance gives you a little wiggle room to slide in the shelves. If a shelf is too tight to slide, plane or sand the bottom.

Finishing

35. Take the bookstand apart and sand each piece up to 180 grit. Seal with a wash coat of shellac (two parts standard 3-lb. cut shellac thinned with one part denatured alcohol) and sand with 240-grit paper. Apply a wiping varnish (Photo 19 and Sources, below). The shellac slightly seals the surface, helping the finish to go on much more evenly. We used Minwax Antique Oil, because it gives the cherry a beautiful warm color. We put the second and third coats on with fine synthetic steel wool (see Sources, below). Rubbing back and forth many times over with steel wool eliminates the need for further sanding and makes a velvety soft surface.

36. Let the finish dry for a few days before reassembling the case (Photos 20 and 21). **AW**

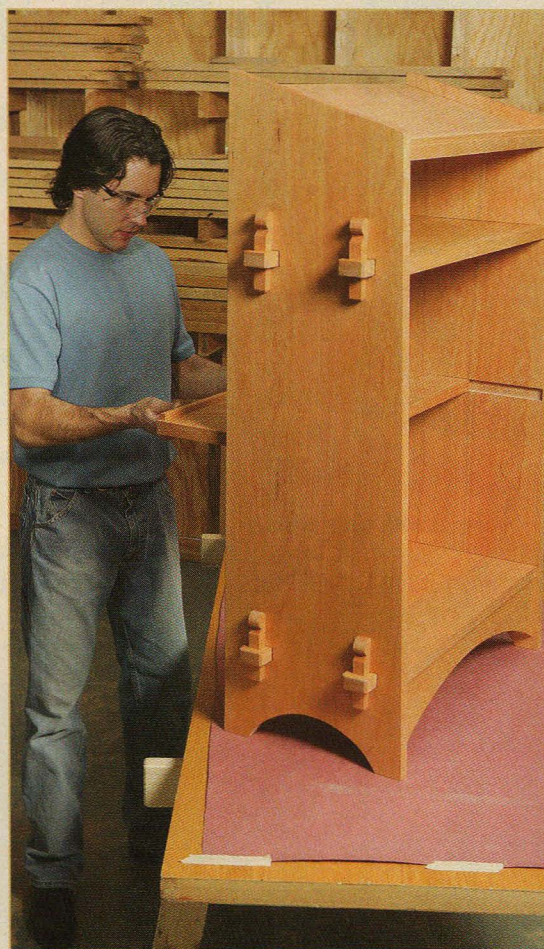
Sources

MLCS, (800) 533-9298
www.mlcswoodworking.com
3-Wing slot cutter, 1/2" shank,
1/4"-wide cut, #18648, \$26;
additional bearing to make
1/4"-deep cut, #12113, \$7
Top-bearing pattern bit, 1/2"
dia., 1/4" shank, 1" cutting
length, #16506, \$20
Toggle hold down clamp,
#9058, \$8 each
3/4" Forstner bit, #9209, \$6;
7/8" bit, #9211, \$7.

Lee Valley, (800) 871-8158
www.leevalley.com
3/8" mortise chisel,
#85502.02, \$30.

Minwax, (800) 523-9299
www.minwax.com
Antique Oil Finish, 1 qt.,
\$12-\$15.

Woodcraft Supply, (800) 225-
1153, www.woodcraft.com
Fine fibral abrasive wool,
#145365 \$20.



21 Slide in the loose shelves and you're done. You've got a rock-solid bookstand that's held together with nothing but wedges.

Cutting List 47" H x 31" W x 14-1/2" D

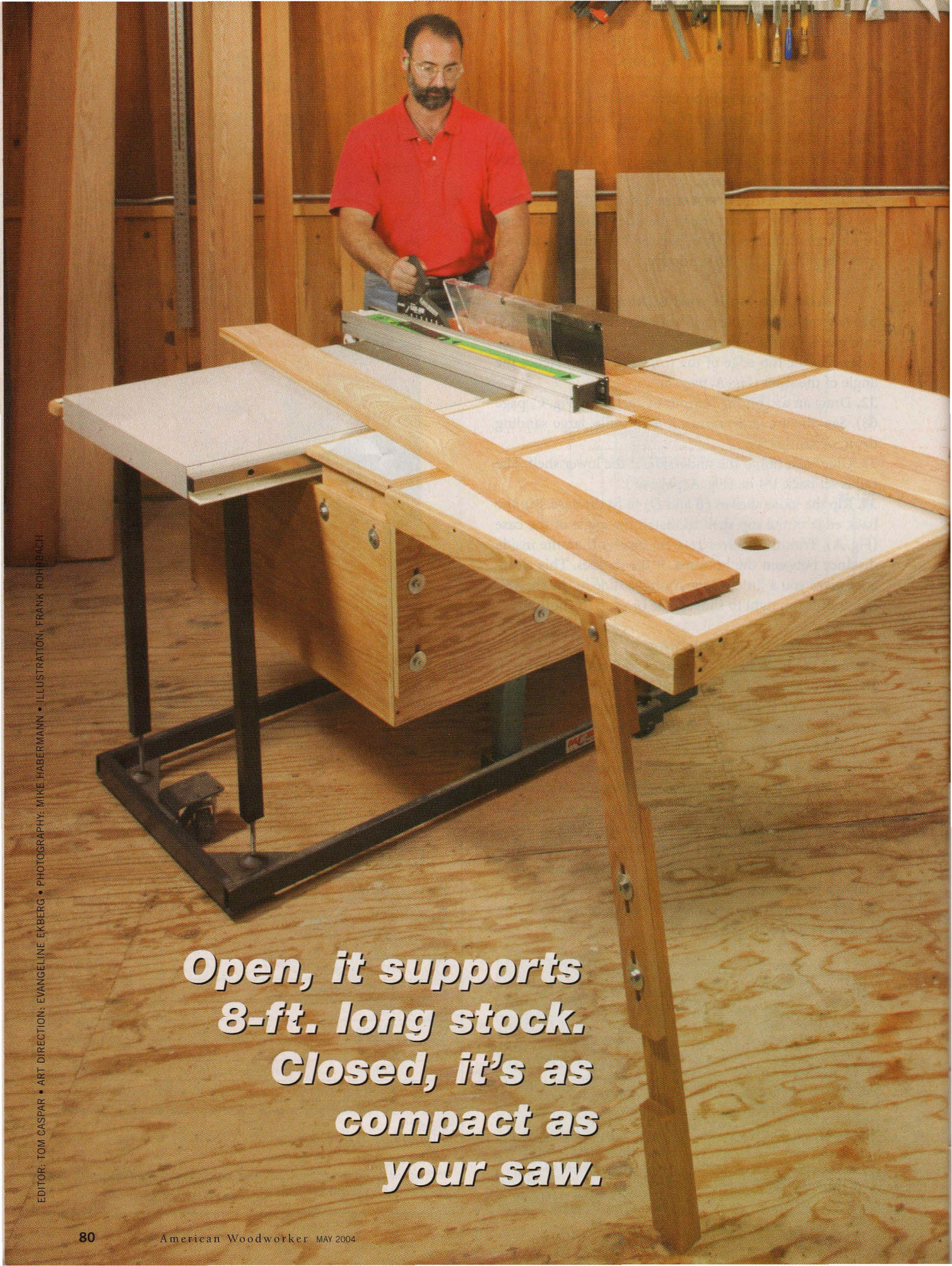
Part	Name	Qty.	Th x W x L
A	Side	2	1" x 14-1/2" x 47" *
B	Slanted shelf	1	1" x 13" x 26-3/4" **
C	Top shelf	1	1" x 12-11/16" x 31"
D	Middle shelf	1	1" x 13-1/4" x 26-3/4"
E	Bottom shelf	1	1" x 13-13/16" x 31"
F	Rail	2	1" x 5-1/2" x 26" ***
G	Wedge	9	7/8" x 1-1/4" x 12"
H	Ledge	4	1/2" x 1/2" x 26"
J	Spline	As needed	1/4" x 1/2" x 24" ****
	Shelf template	1	1/2" x 14" x 26-3/4"

* Glue from narrower boards as needed. Best if glue joint runs down the middle.

** Bevel back edge 15 degrees.

*** Bevel front rail 2-1/2 degrees.

**** Actual width should be 1/32" less than combined depth of two grooves. Cut to length as needed.



***Open, it supports
8-ft. long stock.
Closed, it's as
compact as
your saw.***

Folding Outfeed Table

By George Vondriska

Roller stands are okay, but every saw really ought to have an outfeed table. It makes ripping lumber or plywood a lot more convenient and much safer. The bigger the table, the better. But how's it going to fit into a small shop?

For those of you with a contractor's saw on a mobile base, we've designed the kind of table you'd wish the saw had to begin with. It goes wherever the saw goes. Folded up, it doubles as a sturdy assembly table. Folded down, you still get an additional foot of support for cutting short stuff. We've also built in storage space for all the gear a saw

needs: a rip fence, miter gauge, push sticks and extra blades. The only thing we haven't figured out is how to store the legs; if you have a solution, send it in!

Tools and Materials

You'll need a tablesaw, router and jigsaw, and that's about it. We used 3/4-in. oak plywood for most of the understructure because it's strong. The tops are made from melamine; it's slippery and easy to clean. The edges and legs are oak because they'll take a lot of dings, but any hardwood will do. The total cost of material and hardware is about \$200.

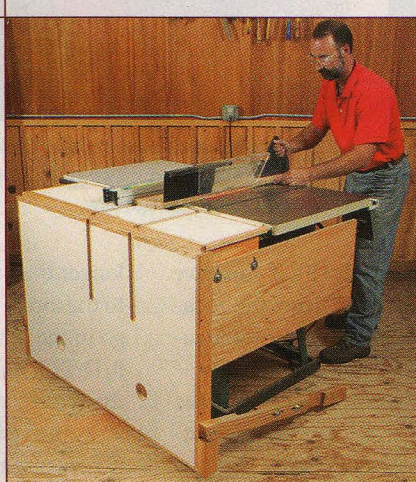
We've looked at a lot of contractor's saws to make sure these

plans would work, but there's a chance your saw may be an odd size. The table will still work, but you may have to modify some of its dimensions before you make the first cut (see "Measure Your Saw," page 86).

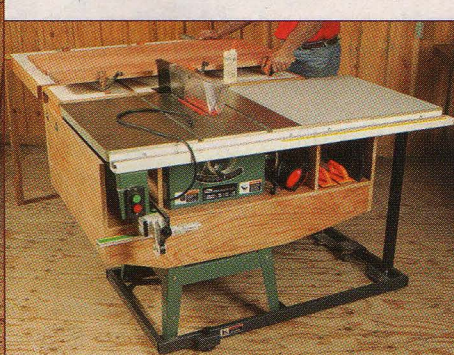
Build the Platform

1. Cut parts A through F to size. Glue banding (M) on top of the riser (F). Cut slots in the outer ribs (D) by connecting two 1/2-in. holes with jigsaw cuts (Photo 1). Cut recesses for motor clearance in the deck (A) and rear support arm (B, Fig. A, Detail 1, page 83).

2. Screw the support arms to the deck. Add the outer ribs using one of the inner ribs (C) as a spacer

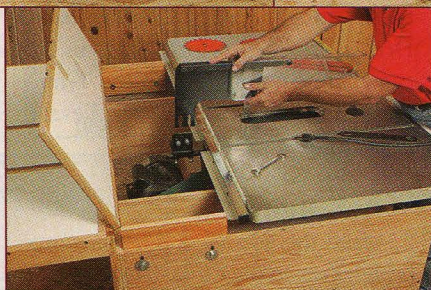


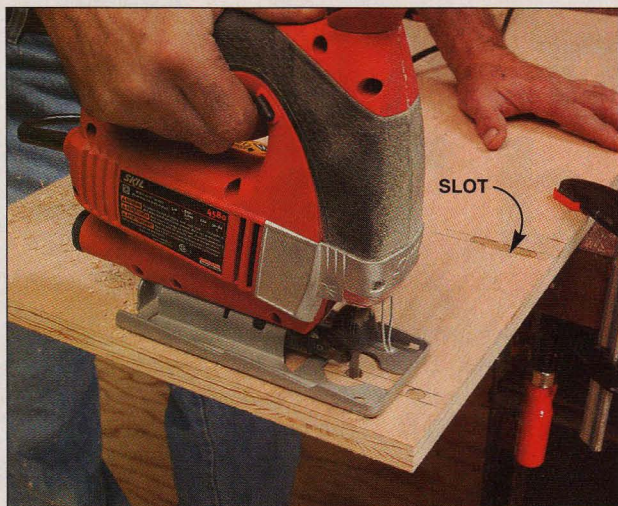
It's a real space-saver. This outfeed table is permanently attached to your saw but tucks out of the way when you don't need it.



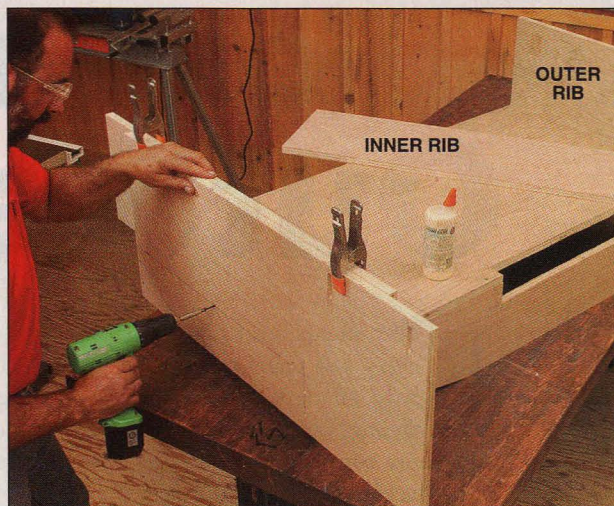
The table is rock solid because it's bolted tight between the saw's motor and base.

The motor and blade guard are easy to access by opening a hinged lid.

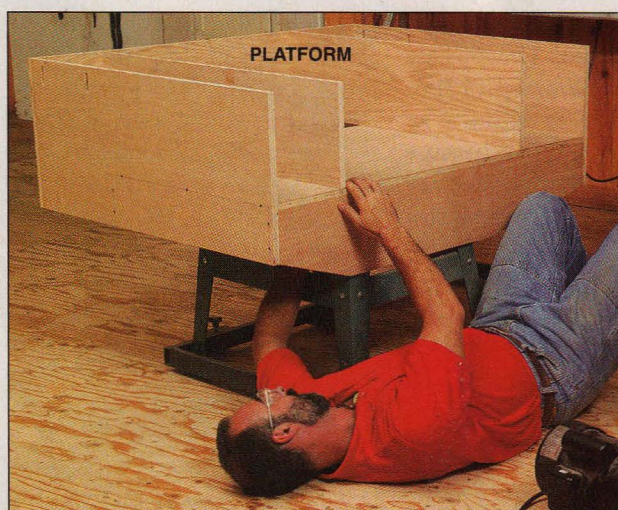




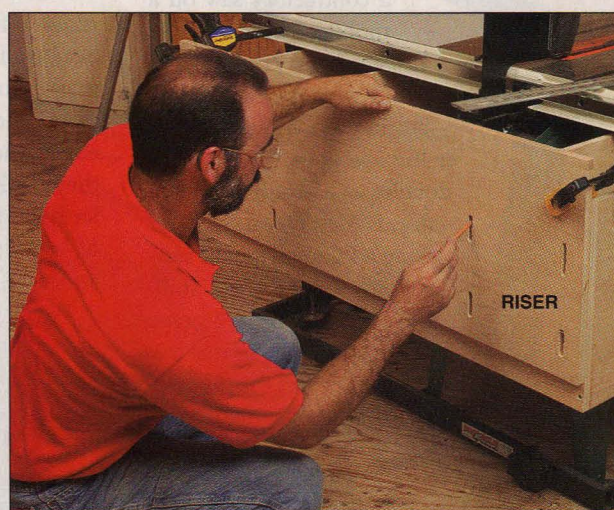
1 Cut adjustment slots with a jigsaw. These slots allow you to accurately align the table with the top of virtually any contractor's saw.



2 Assemble the platform. It fits between the saw and stand and supports the table. Temporarily clamp an inner rib to an outer rib so their tops line up across the platform in the final assembly.



3 Disassemble your saw and put the platform on the stand. Mark the locations of the stand's bolt holes on the bottom of the platform.



4 Clamp the riser to the back of the platform. The riser supports the outfeed table. Adjustable slots make it easy to level the table with the saw.

(Photo 2). Add the back (E).

3. Take the motor off the saw. Get some help to remove the upper half of the tablesaw from the stand. Place the platform on the stand with the front support arm pushed tight against the stand. The distance from the left edge of the stand to the outside of the left outer rib is determined by your saw's Offset measurement (see "Measure Your Saw," page 86). Mark the locations of the saw-to-stand bolt holes (Photo 3).

4. Drill the bolt holes through the deck, replace the saw and bolt the saw to the base. Replace the original bolts with longer ones if necessary.

5. Cut slots in the riser (F). If you have moved the inner ribs from the locations in our plan, check the slot locations so they don't run into the ribs.

6. Clamp the riser to the back of the platform (Photo 4). Use a straight-edge to level the riser with the saw table. Trace the slots onto the back. Drill 1/2-in. holes for T-nuts in the center of the slots. Tap in the T-nuts and bolt the riser to the back. Level it again to the saw table.

Build The Legs

7. Make the legs (S and T). Arrange both halves so their total length is 1 in.

longer than the distance from the floor to the top of the saw. Mark for T-nuts to go in the center of the slots (Photo 5).

8. Drill 1/2-in. holes for the T-nuts, tap them in place and assemble the legs.

9. Round the top corner of the leg so it can pivot away from the stop (R, Fig. A, Detail 2, at right).

10. Drill the pivot bolt holes in both legs and in the side rail (P) of the folding table (Fig. A, Detail 2).

Make the Tabletops

11. Screw a continuous hinge to the riser (Photo 6). Set it lower than the riser by the thickness of the melamine

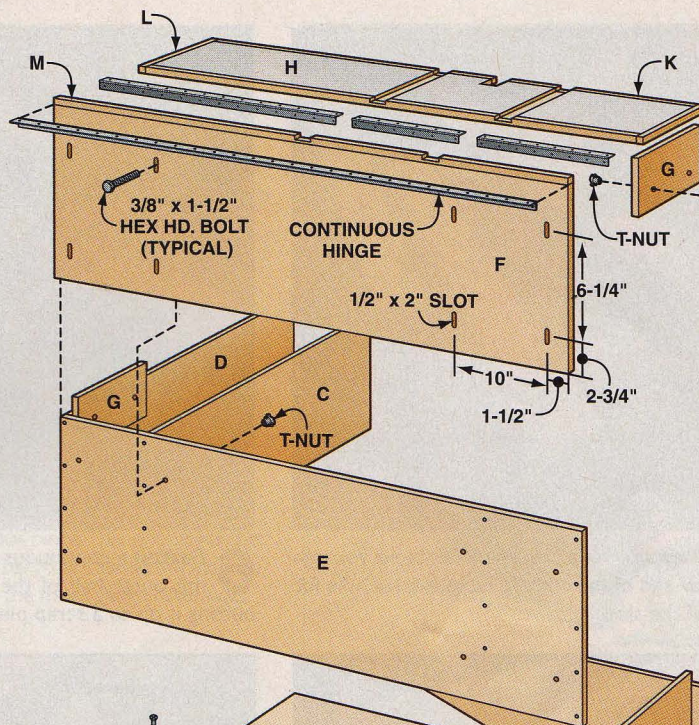
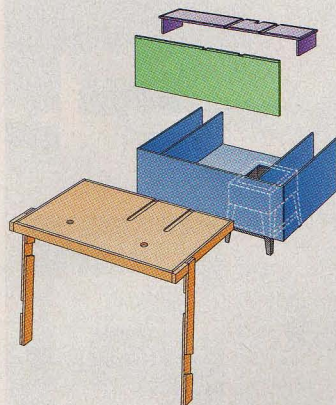
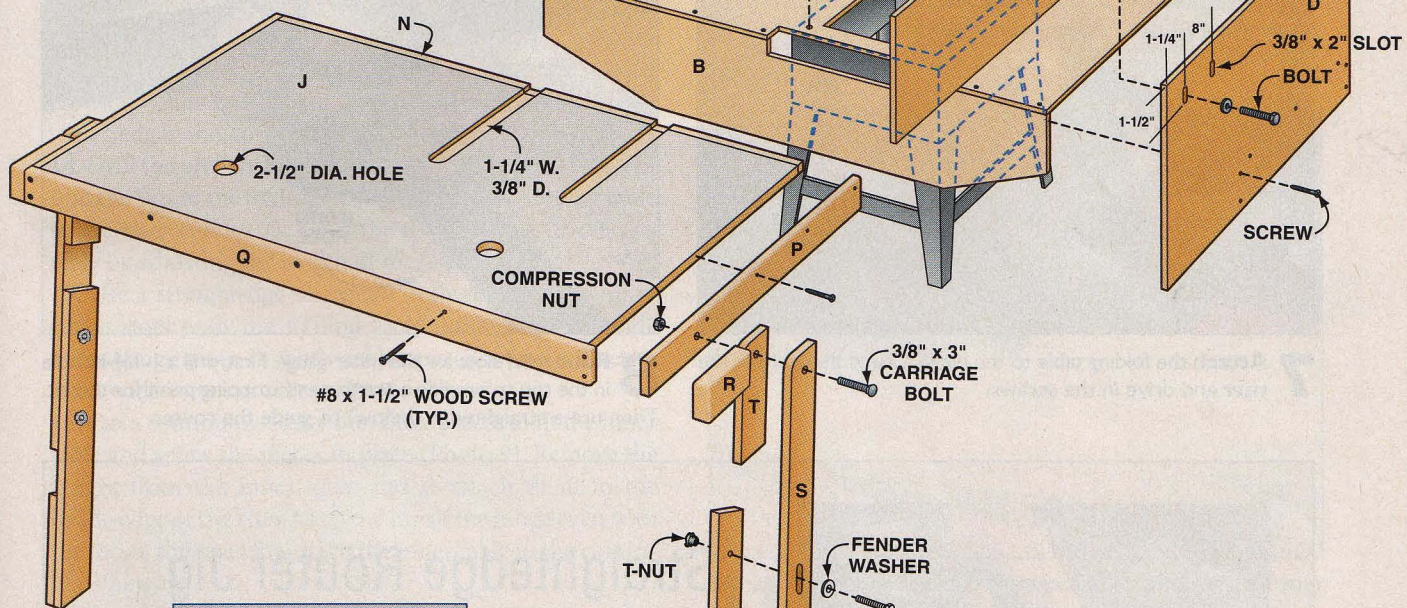
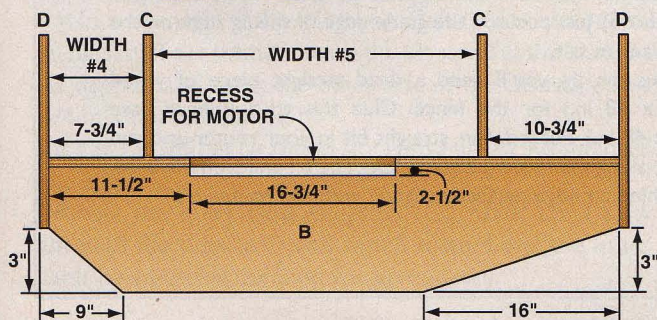


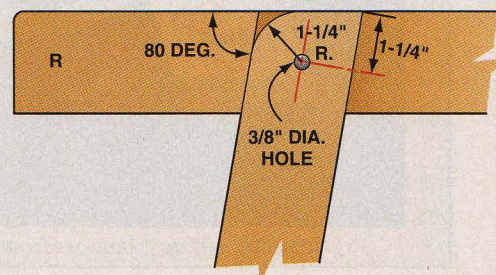
Fig. A Exploded View



Detail 1
Rear View of Platform



Detail 2 Top of Leg





5 Build the legs. They also have adjustable slots so you can quickly level the far end of the outfeed table. Mark a hole for a T-nut in the middle of the slot.



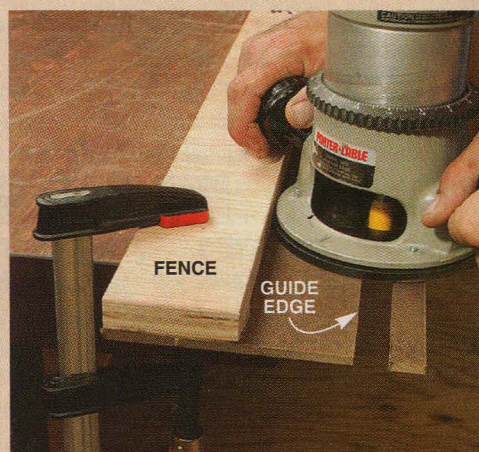
6 Fasten a continuous hinge to the riser. This hinge supports the outer half of the outfeed table. Position the hinge by butting it up to a scrap piece from the table's top.



7 Attach the folding table to the hinge. Clamp the table to the riser and drive in the screws.



8 Rout relief slots for the miter gauge. First, drill a 1-1/4-in. hole in the top to provide a starting and stopping point for the bit. Then use a straightedge (below) to guide the router.



Straightedge Router Jig

This basic jig is as easy as pie to make but serves dozens of uses. You can trim big pieces of rough-cut plywood to size (like the pieces you'll need to build this outfeed table) or rout a dado (see Photo 8, above). Just position the guide edge of the jig right on the line you want to cut.

To make the jig, you'll need a dead straight piece of wood (3/4 x 3 x 48 in.) for the fence. Glue this to a thinner base (1/4 x 7 x 48 in.). Put a 3/4-in. straight bit in your router and run the router along the fence (photo at left). The bit will trim the base, leaving behind an edge perfectly aligned with the router bit.



9 Drill holes for a second continuous hinge. This one holds the inner half of the outfeed table (the part that's above the motor). This hinge is cut in three parts to clear the miter gauge relief slots.

top. A self-centering drill bit (also known as a Vix bit) makes this job much easier (see Source, page 86).

12. Cut the tops (H and J). Edge them with narrow bands (K, L and N) and wider rails (P and Q). Drill the hand holds in the folding table (see Fig. A, page 83).

13. Make the leg stops (R) by gluing two 3/4-in. x 2-1/2-in. pieces together. Cut the leg stop end at 10 degrees. Glue and screw the leg stops to the folding table. Rout all the table's edges and corners with a 1/4-in. round-over bit.

14. Drill the pivot bolt holes in the rail of the folding table. Bolt the legs to the folding table and hinge the folding table to the riser (Photo 7). Level the folding table to the saw table by adjusting the length of the legs.

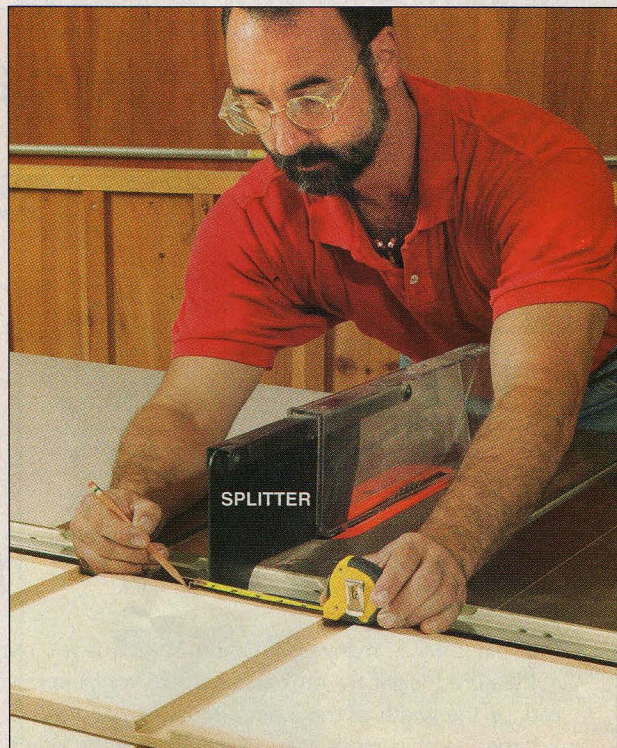
15. Use a straightedge to extend both edges of the miter gauge slots onto the folding table. Rout 1-1/4-in.-wide miter-gauge slots in both tabletops (Photo 8). They're extra wide so your miter gauge won't bind.

16. Cut a continuous hinge into three pieces to fit the inner table and screw the pieces in place (Photo 9). Remove the hinges from the inner table and re-attach them to the inside edge of the riser. Keep the top of the hinge even with the top of the riser. Re-attach the inner table to the continuous hinge.

17. Position the inner table parallel to the saw and against the back of the splitter. Clamp the inner table in place and mark the splitter clearance slot (Photo 10). Locate the slot 3/4 in. to the right of the splitter on a left-tilt saw and 3/4 in. to the left of the splitter on a right-tilt saw. Tilt the blade to 45 degrees and mark the other side of the clearance slot 3/4 in. from the splitter.

18. Cut the splitter clearance slot with a jigsaw. Round over the edges.

19. Cut the inner table supports (G). Mark for T-nuts through the slots in D and install them. Level the inner table by adjusting the supports up or down.



10 Mark the location of the blade guard's splitter onto the inner table. Tilt the saw blade all the way and make a second mark. Then cut out a clearance slot between the marks.



11 Sand a hollow in the bottom of the inner table if your motor sticks up too far when it's tilted.

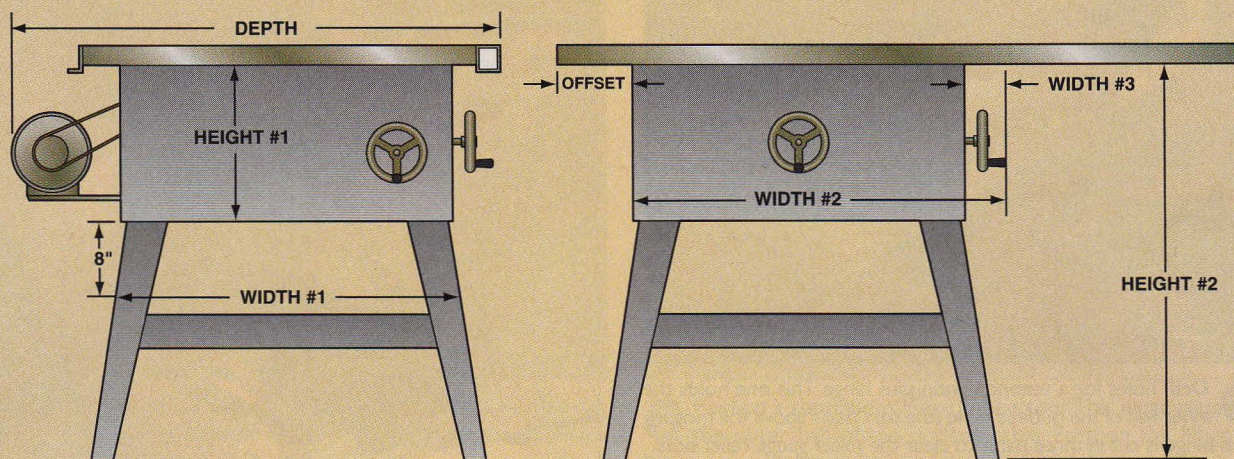
20. If needed, sand a relief for the motor in the bottom of the inner table (Photo 11).

Finishing Up

Varnish the wooden surfaces to protect them from wear. No finish is required on the melamine.

There's lots of room for adjustment on this table. If any sag develops, you can raise or lower the riser, legs and inner table supports to make up the difference.

Measure Your Saw First, Then Cut



Our plans will fit many contractor's saws, but you may have to modify them to fit your machine.

1. Measure Height #1 on the saw's box from the lowest hanging point, like the fence rails. If it is less than 11 in., reduce the width of the inner and outer ribs (C and D) by the difference.
2. If the Depth is more than 34 in., increase the length of C and D by the difference and enlarge the inner table.
3. If Width #1 is greater than 22 in., increase the width of the deck (A) by the difference.
4. If Height #2 is less than 34 in., reduce the length of the folding table (J) by the difference.
5. Measure the Offset for use in Step 6.
6. To position the left inner rib (C), measure the Offset and subtract 2-3/4 in. This gives you the distance between ribs C and D (Width #4, see Fig. A, Detail 1, page 83). Use Width #2 to locate the right inner rib (C) to ensure that it doesn't interfere with the blade-tilt handwheel. If Width #2 is more than 22 in., add 5 in. to it. This new measurement (Width #5, Fig. A, Detail 1) is the distance between the left and right inner ribs.
- 7) If the handwheel is on the left side of the saw, measure Width #3. Add 3-3/4 in. for hand clearance and plywood thickness, and deduct this from the Offset. This is the distance (Width #4) between the left inner rib (C) and left outer rib (D). To locate the right inner rib, measure Width #2 and add 5 in. This is the distance (Width #5) between the two inner ribs. **AW**

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Woodworkers' Supply
(800) 645-9292, www.woodworker.com
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#825-028, \$17.

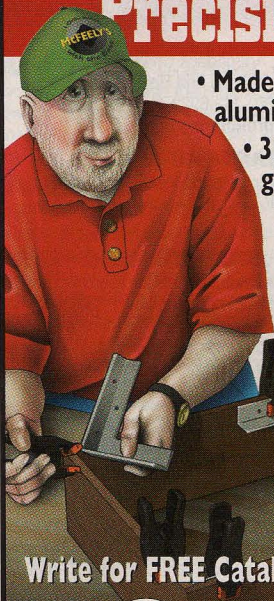
Materials	1 sheet	3/4" x 4' x 8'
		melamine
	2 sheets	3/4" x 4' x 8' cabinet-grade oak plywood
	10 board feet	3/4"-thick oak

Hardware	Qty	Part
	16	3/8" T-nuts
	16	3/8" x 1-1/2" hex head bolts
	16	3/8" fender washers
		#8 x 1-1/2" flathead wood screws
	2	3/8" x 3" carriage bolt
	2	3/8" compression nut
	2	1-1/2" x 48" continuous hinges

Cutting list

	Qty.	Description	Size	Material
A	1	Deck	3/4" x 24" x 46-1/2"	Plywood
B	2	Support arms	3/4" x 8" x 46-1/2"	Plywood
C	2	Inner ribs	3/4" x 10" x 36"	Plywood
D	2	Outer ribs	3/4" x 15-3/4" x 36"	Plywood
E	1	Back	3/4" x 15-3/4" x 48"	Plywood
F	1	Riser	3/4" x 15-3/4" x 48"	Plywood
G	2	Inner table supports	3/4" x 5-1/2" x 11"	Plywood
H	1	Inner table	3/4" x 11" x 46-1/2"	Melamine
J	1	Folding table	3/4" x 32" x 48"	Melamine
K	2	Inner table bands/long	3/4" x 3/4" x 46-1/2"	Oak
L	2	Inner table bands/short	3/4" x 3/4" x 12-1/2"	Oak
M	1	Riser band	3/4" x 3/4" x 48"	Oak
N	1	Folding table band	3/4" x 3/4" x 48"	Oak
P	2	Folding table rails/short	3/4" x 2-1/2" x 32-3/4"	Oak
Q	1	Folding table rail/long	3/4" x 2-1/2" x 49-1/2"	Oak
R	2	Leg stops	1-1/2" x 2-1/2" x 6"	Oak
S	4	Leg halves	3/4" x 2-1/2" x 25"	Oak
T	4	Leg blocks	3/4" x 2-1/2" x 7-1/2"	Oak

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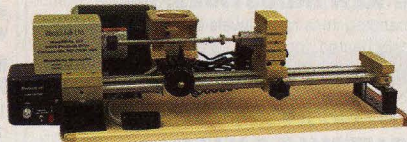
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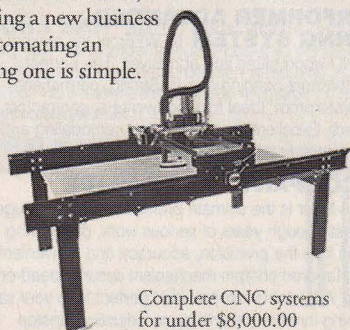
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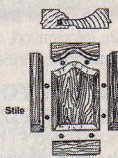
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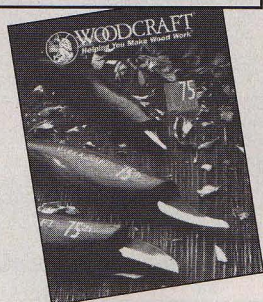
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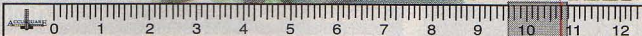
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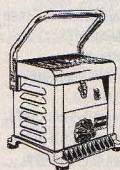
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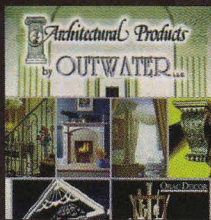
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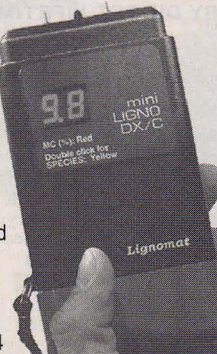
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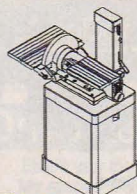
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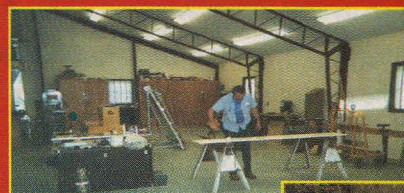
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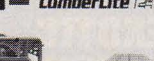


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Oops!

Edited by **Tim Johnson**



Lumpy Laminate

I prepared to laminate the large countertop for my kitchen island in my garage workshop. Cramped for space, I set the substrate on sawhorses and laid the sheet of plastic laminate upside down on top of the substrate. My plan was to roll contact cement on the laminate and then move it out of the way so I could spread cement on the substrate.

I opened the door for ventilation, rolled the laminate with cement and leaned the sheet against the wall to dry. But when I began to roll the substrate, disaster struck!

A gust of wind blew the sheet of laminate over onto the garage floor, glue-side down. Argh! It was covered with bits of tracked-in gravel from the driveway.

The only way to be sure I wouldn't end up with lumps in my countertop was to get out the lacquer thinner, remove all of the cement (and imbedded gravel) from the plastic laminate and start over.

Allen Carl Fredrickson

Manual Training

I recently purchased a new benchtop thickness planer. I couldn't wait to start using it, so I only glanced at the operator's manual. I missed the warning to never plane material less than 12 in. long.

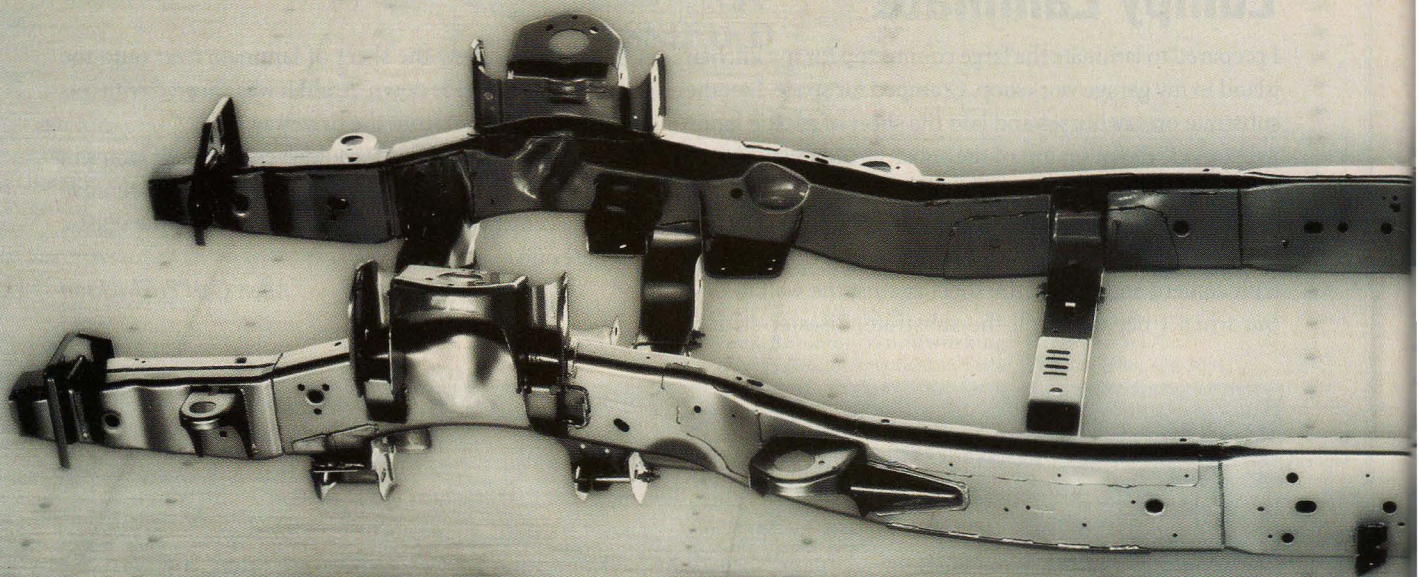
Faster than lightning, the first 6-in.-long piece of oak I tried to plane shot right back out and nailed me on the thigh just above my knee. The corner left a nasty cut and a large bruise as a warning to play by the rules! I am still

amazed at the force with which a machine can hurl even small pieces of wood. From now on, I'll suck it up and read my operator's manuals more carefully.

Paul Deemer

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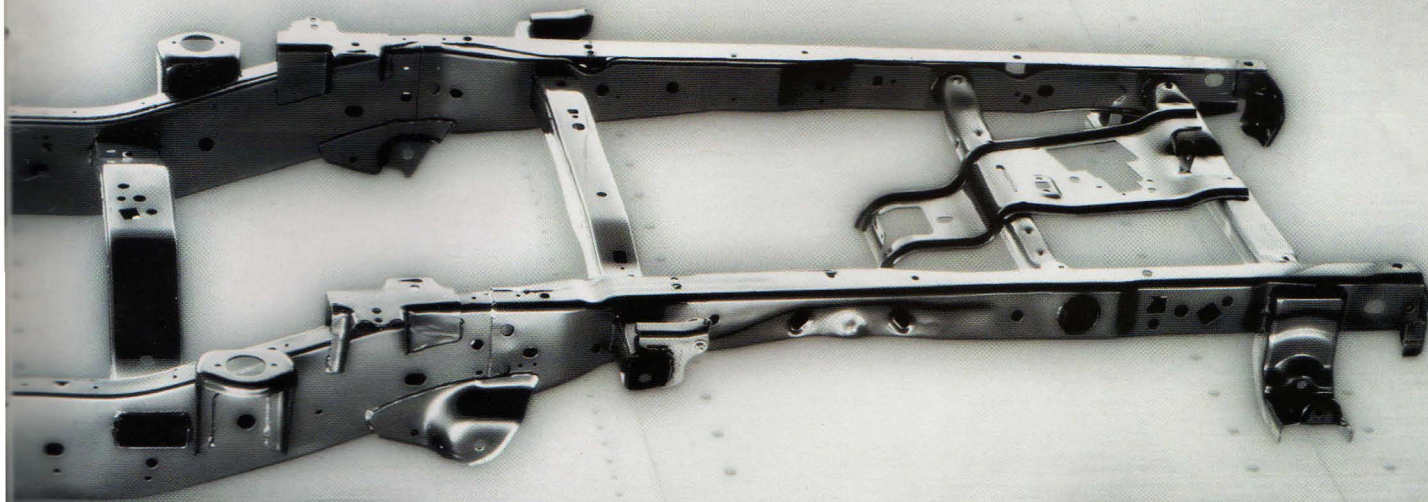
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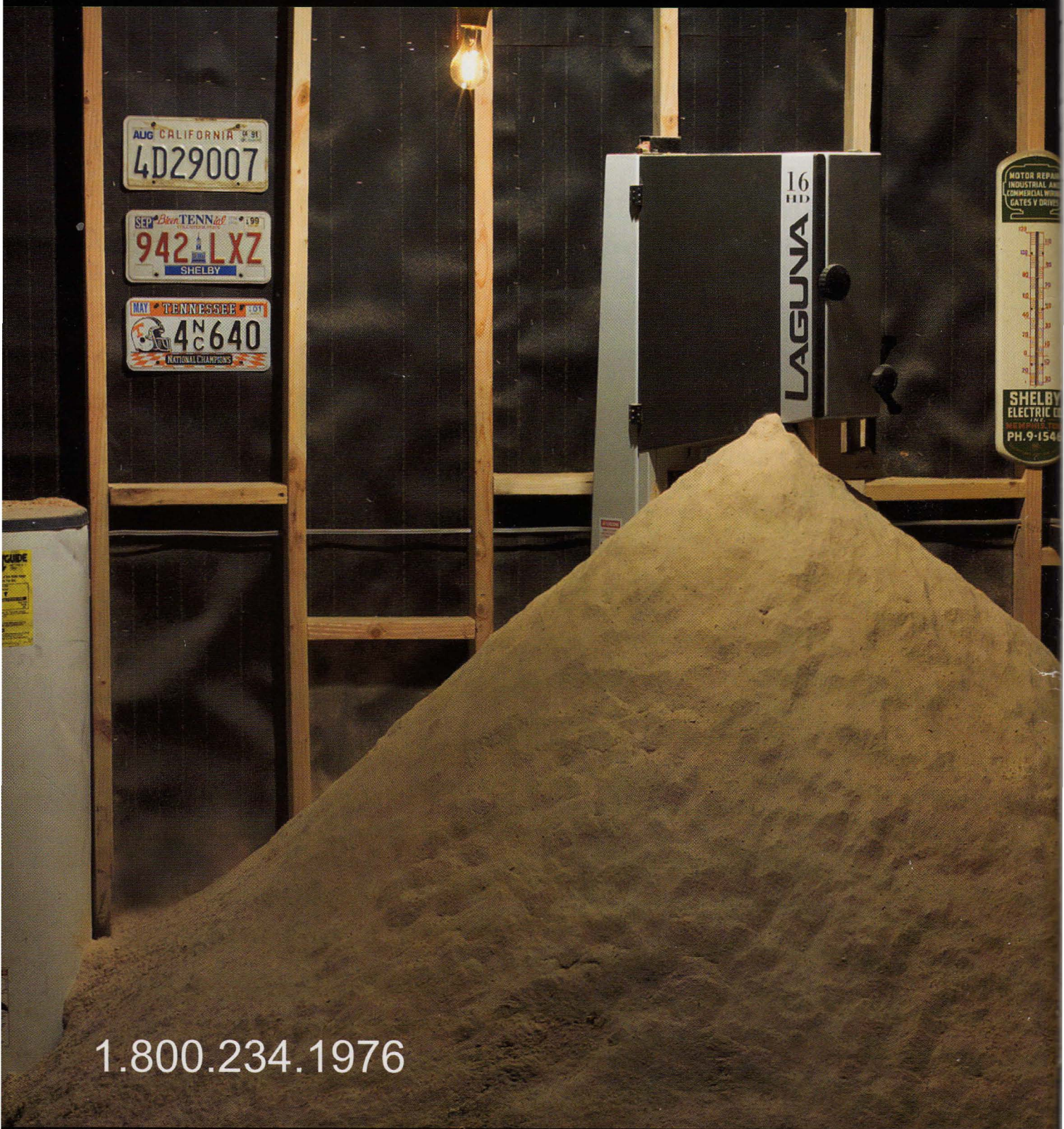


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